DOCUMENT RESUME

ED 104 995 32 UD 014 983

AUTHOR Richard, Wayne C.; And Others
TITLE State of Tennessee Annual Evaluation Report for Fiscal Year 1973.
INSTITUTION Tennessee State Dept. of Education, Nashville.
SPONS AGENCY Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C. Div. of Compensatory Education.
PUB DATE 73
NOTE 131p.

EDRS PRICE MF-$0.76 HC-$6.97 PLUS POSTAGE
DESCRIPTORS Ancillary Services; *Annual Reports; Board of Education Role; Cost Effectiveness; Educational Assessment; Inservice Programs; Instructional Programs; *Program Administration; *Program Evaluation; Special Education; State Government; Summer Programs
IDENTIFIERS *Elementary Secondary Education Act Title I; ESEA Title I; Tennessee

ABSTRACT

This State of Tennessee Annual Evaluation Report on programs, prijects, services and activities funded in whole or in part under Title I of the 1965 Elementary Secondary Education Act for Fiscal Year 1973 is organized into seven parts. Part One is an "Introduction". Part Two, "Process and Outcome of Title I Instructional Activities" includes two sub-sections. The first sub-section 'Instructional Activities' includes discussions of needs assessment, major activities and performance objectives, and other topics. The second sub-section focuses on "Measured Outcome of Title I Instructional Activities". The discussion in Part Three, "Supportive Services" is organized into three sections dealing with quantitative analysis, qualitative analysis, and exemplary programs, respectively. Part Four concerns "Inservice Activities" while Part Five specifies "Local Educational Agency Problems and Recommendations". Part Six, "Summer Programs" discusses instructional activities, supportive services, inservice activities, local educational agency problems and recommendations for conducting summer projects. Part Seven Section C Programs, discusses additional services provided for children who were consistently and considerably below the expected Title I grade levels. (JM)

ED104995

STATE OF TENNESSEE

ANNUAL EVALUATION REPORT

FOR

FISCAL YEAR 1973

Elementary and Secondary Education Act

TITLE I

P.L. 91-230

Submitted By

Dr. Willis C. Nowell, Director
Compensatory Education

For

Dr. Benjamin E. Carmichael
Commissioner of Education

Prepared Under Contract By:
Dr. Wayne C. Richard
Mr. Russell O. Mays
Mrs. Phyllis M. McInnis

Dade Wallace Center
700 Craighead Avenue
Nashville, Tennessee 37204

UD 014983

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TABLE OF CONTENTS

PART I - INTRODUCTION	1
Administrative Structure and Role of SEA in Compensatory Education	3
Population Served, Number of Title I Projects, and Cost	7
PART II - PROCESS AND OUTCOME OF TITLE I INSTRUCTIONAL ACTIVITIES	10
Instructional Activities	12
Needs Assessment	12
Major Activities and Performance Objectives	15
Methods of Outcome Assessment	19
Most Valuable Title I Activities	29
Other Federal Projects Involved	31
Measured Outcome of Title I Instructional Activities	33
Impact on Regular School Program	65
Cost Analysis	68
PART III - SUPPORTIVE SERVICES	74
Quantitative Analysis	74
Qualitative Analysis	80
Exemplary Programs	83
PART IV - INSERVICE ACTIVITIES	88
PART V - LOCAL EDUCATIONAL AGENCY PROBLEMS AND RECOMMENDATIONS	93
Problems	93
Recommendations	97

PART VI - SUMMER PROGRAMS 100

Instructional Activities 100

Needs Assessment 101

Major Activities 102

Methods of Outcome Assessment 102

Outcome of Instructional Activities 103

Most Valuable Title I Summer Activities 106

Supportive Services 108

Inservice Activities 109

Local Education Agency Problems 109

Recommendations for Conducting Summer Projects 110

PART VII - SECTION C PROGRAMS 112

SUMMARY 115

APPENDIX A

LIST OF TABLES

		PAGE
Table I.	ESEA Title I Programs in Tennessee for FY 73	8
Table II.	LEAs Participating in Regular School Term and Summer Title I Projects	9
Table III.	Most Valued Activities of Title I FY 73	30
Table IV.	Reading Achievement Test Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification A	34
Table V.	Title I Pupils' Mean Gain Scores in Reading Achievement for LEAs Reporting Pre- and Posttest Data	35
Table VI.	Reading Achievement Test Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification A	39
Table VII.	Mathematics Achievement Test Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification A	41
Table VIII.	Mean Grade Equivalent Gain Scores in Mathematics Achievement for LEAs Reporting Pre- and Posttest Data. SMSA Classification A	41
Table IX.	Reading Achievement Test Scores for LEAs Reporting Pre- and Posttest Data. SMSA Classification A	44
Table X.	Title I Pupils' Mean Reading Achievement Gain Scores for LEAs Reporting Pre- and Posttest Data. SMSA Classification B	45
Table XI.	Comparison of Title I and non Title I Stanford Achievement Test Reading Gain Scores in Grade Equivalent Years for Grades 2-8. SMSA Classification B	45
Table XII.	Comparison of Various Ranges of Stanford Achievement Test Reading Gain Scores for Grades 2-8. SMSA Classification B	49

Table XIII.	Reading Achievement Test Results for LEAs Reporting Pre- and Posttest Data. SMSA Classifications C & D	51
Table XIV.	Mean Gain Scores in Reading Achievement for LEAs Reporting Pre- and Posttest Data. SMSA Classification C and D	52
Table XV.	Comparison of Various Ranges of Reading Achievement Gain Scores for Grades 2-8. SMSA Classifications C and D	56
Table XVI.	Reading Achievement Test Results for LEAs Reporting Pre- and Posttested Data. SMSA Classification E	58
Table XVII.	Mean Gain Scores in Reading Achievement for LEAs Reporting Pre- and Posttest Data. SMSA Classification E	59
Table XVIII.	Comparison of Various Ranges of Reading Achievement Gain Scores for Grades 1-12. SMSA Classification E	60
Table XIX.	Summary of ESEA Title I Instructional Activities Costs for Sample* of LEAs in Tennessee in FY 73	69
Table XX.	Cost of ESEA Title I Instructional Activities for LEAs in SMSA Classification A for FY 73	70
Table XXI.	Cost ESEA Title I Instructional Activities for LEAs in SMSA Classification B for FY 73	71
Table XXII	Cost of ESEA Title I Instructional Activities for LEAs in SMSA Classification C and D* for FY 73	72
Table XXIII.	Cost of ESEA Title I Instructional Activities for LEAs in SMSA Classification E* and FY 73	73
Table XXIV.	Summary of ESEA Title I Supportive Services Cost for Sample of LEAs* in Tennessee for FY 73	75
Table XXV.	Cost of ESEA Title I Supportive Services for LEAs in SMSA Classification A in FY 73	76
Table XXVI.	Cost of ESEA Title I Supportive Services for LEAs in SMSA Classification B in FY 73	77
Table XXVII.	Cost of ESEA Title I Supportive Services for LEAs in SMSA Classification C and D* in FY 73	78

Table XXVIII.	Cost of ESEA Title I Supportive Services for LEAs in SMSA Classification E* in FY 73	79
Table XXIX.	ESEA Title I Inservice Activity in Tennessee for FY 73	89
Table XXX.	ESEA Title I Summer Program in Tennessee for FY 73	101
Table XXXI.	Achievement Test Results for Summer Program FY 73 for LEAs Reporting Pre- and Posttest Data	105
Table XXXII.	Length of Time Between Pre- and Posttest for Title I Summer Projects in Tennessee for FY 73	106
Table XXXIII.	Supportive Services for ESEA Title I Summer Projects for FY 73	108
Table XXXIV.	Inservice Activity for ESEA Title I Summer Programs in Tennessee for FY 73	109

LIST OF FIGURES

		PAGE
Figure 1.	Structural Location of Compensatory Education Administration in the Tennessee Education Department	1
Figure 2.	Stanford Diagnostic Reading Test Pre-and Posttest Results of Title I Students. SMSA Classification A	2
Figure 3.	Stanford Diagnostic Reading Test Gain Scores for Title I Students. SMSA Classification A	37
Figure 4.	Stanford Diagnostic Arithmetic Test Pre- and Posttest Scores for Title I Students. SMSA Classification A	42
Figure 5.	Stanford Diagnostic Arithmetic Test Gain Scores for Title I Students. SMSA Classification A	42
Figure 6.	Stanford Achievement Test Reading Pre- and Posttest Results for Title I Students. SMSA Classification B	46
Figure 7.	Stanford Achievement Test Reading Gain Scores for Title I Students. SMSA Classification B	47
Figure 8.	Metropolitan Reading Achievement Pretest Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification C and D	53
Figure 9.	Metropolitan Reading Achievement Posttest Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification C and D	54
Figure 10.	Metropolitan Reading Achievement Gain Scores for LEAs Reporting Pre- and Posttest Data. SMSA Classification C and D	55
Figure 11.	Metropolitan Reading Achievement Pretest Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification E	62
Figure 12.	Metropolitan Reading Achievement Posttest Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification E	63
Figure 13.	Metropolitan Reading Achievement Gain Score Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification E	64

PART I

INTRODUCTION

Federally supported compensatory education programs for culturally disadvantaged children completed its eighth year in June 1973. The nationwide program has poured over ten billion extra dollars into local school districts to upgrade the quality of education for children whose family income is substandard. The State of Tennessee has reaped many benefits from its portion of the Federal monies. Hundreds of thousands of children have been provided new and/or supplemental programs ranging from nutritious meals to creative arts. Local school systems have added critically needed educational programs, staff, classroom and office space with the goal of enhancing the intellectual, physical, social and personal adjustment of disadvantaged children.

The results of these Title I efforts over the past eight years have been positive. Many thousands of underachieving children have increased their academic level of performance well beyond normal growth rate by participating in remedial reading, math, or other subject-related projects. Enrichment programs including academics, arts, humanities and social studies have significantly broadened many children's experiential horizons. Personal and social behavior projects have successfully taught potentially deviant children respect for themselves and others, confidence in their own abilities and the rewards of social responsibility.

Title I programs in Tennessee have responded to the physical needs of disadvantaged children by providing medical and dental services, nutritional school meals, and physical fitness projects. Thousands of

children who would otherwise grow up with serious health problems have received vital treatment, both preventive and interventive. Addition of valuable social and psychological services to local school systems has also been an important aspect of Title I programming over the past eight years. Historically poor people, especially children, have had little or no opportunity for mental health and social services other than public welfare support. The advent of compensatory education has provided an opportunity to fully implement the philosophy of treating every aspect of the children's life as important for the education enterprise. Thousands of children and families have benefitted from the services rendered by new or additional school psychologists and social workers.

Although the overall evaluation of Title I programming is positive, we recognize that every project undertaken with Title I funds has not demonstrated unequivocal success. One or more of many potential factors have been present to lessen the benefit to children in a minor number of instances. Untested new materials which proved invalid were used with children in some special academic projects. Unskilled teachers and administrators were hired for important positions in some projects. Negotiations with local, state, or federal officials took so long in some cases that the actual time for conducting the projects was too brief to effect any significant change in children's behavior. Poor planning and program execution inhibited the potential learning of participants in some projects. Interference by outside authorities, parents or others sometimes lessened a project's effectiveness.

Not the least problem encountered in the past with Title I programs has been the process of project evaluation. Objectivity, specificity and rigorous scientific procedure have been the goals. However, evaluations have fallen short of the mark in meeting the stringent standards hoped for by state and federal authorities. Some purist critics of compensatory education claim that the entire program is invalid since scientific proof of its success is inconclusive. Nothing could be further from the truth. The same critics will admit that the state of evaluation procedures for global human behavior change, especially for children, is primitive. Admittedly, errors have been made in some instances in evaluation methods, procedures and data interpretation, but the validity of the concept of compensatory education can only be measured over a multiple year period by investigating the long term adjustment of the program participants. The most significant effect, that of social change in attitudes, feelings, educational approaches and administrative provisions by key educational decision makers in local school systems and state agencies, may take a decade or more to accurately assess via pupil progress. On the other hand, short term successes have been quite obvious in many Title I programs as teachers, principals, parents and others become aware of positive growth in individual children. Short term benefits have also been observed in the increased commitment of school personnel, parents and other community members to the total education of minority children.

Administrative Structure and Role of SEA in Compensatory Education

The state educational agency (SEA) is charged with regulatory and leadership responsibilities for ESEA Title I programs among the 150 separate

education agencies in Tennessee. The central and field office staff assigned to this task during FY 73 consisted of:

One coordinator of compensatory education activities

One assistant coordinator

One supervisor of the neglected, delinquent and handicapped

One supervisor of migrant education

One supervisor of evaluation

One supervisor of program review

Eight field supervisors assigned consultation roles with LEAs and located strategically in field service positions (2 in west Tennessee, 4 in middle Tennessee and 2 in east Tennessee)

Seven fiscal personnel located in central office and field service positions

---

Total 21 full time staff

Figure 1 contains a Tennessee Department of Education organization chart identifying the location of compensatory education within the state system.

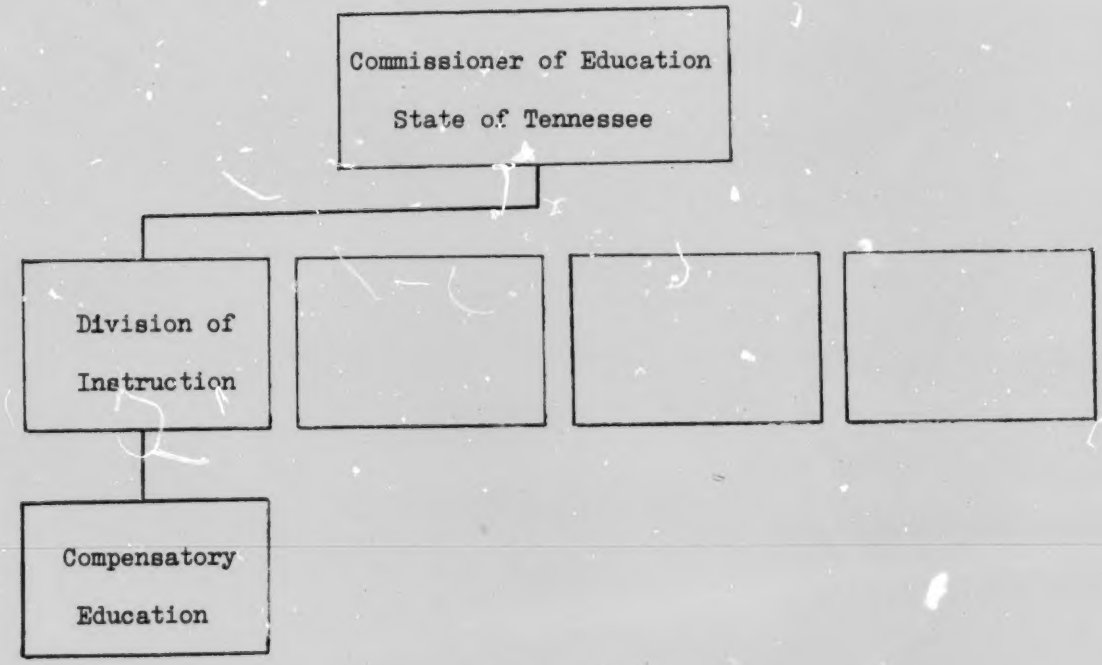

Figure I. Structural Location of Compensatory Education Administration in the Tennessee Education Department

Overall responsibility for administering the statewide compensatory education program rested with the State Coordinator. The field supervisors assisted the LEA Title I staffs in interpreting the law, developing and writing projects and in negotiating the contracts to implement programs. Central office staff also assisted LEAs in these matters in addition to making local visits to LEAs for purposes of facilitating project development and implementation and to monitor program effectiveness and operational procedures according to regulations of Title I legislation. During onsite visits and telephone calls, central office staff and field supervisors provided assistance in needs assessment, identification of disadvantaged children, setting of priorities, classroom techniques, use of community resources, use of teaching aids and evaluation procedures. Onsite visits provided the opportunity to visit classrooms; examine records; and interview students, parents, teachers and administrators in order to ascertain the extent to which each LEA was operating within legal guidelines and approved project applications.

Additional leadership functions performed by SEA staff included:

Disseminating guidelines, instructions and applications regarding intents and purposes of Title I legislation

Consultative services for inservice programs

Assisting in writing and planning of projects

Reviewing project applications

Providing information regarding educational research, test instruments and innovative projects

Population Served, Number of Title I Projects, and Cost

The State of Tennessee is comprised of 146 local school districts and four special state operated schools. This report does not include the Title I programs of the special schools, inasmuch as a separate report has been filed for that group. Data from evaluative reports from the 146 LEAs are reported and summarized here. All 146 school systems participated to some degree in Title I programs during FY 73. Table 1 contains a summary of statistical information regarding the number of LEAs in each Standard Metropolitan Statistical Area category (see Appendix A for category criteria and listing of LEAs in each), cost of programs and number of children served.

Table I

ESEA Title I Programs in Tennessee for FY 73

SMSA Classification	Number of LEAs for which Title 1 Programs Have Been Approved	Funds Actually Committed *	Unduplicated Count of Children				Average Cost Per Pupil
			Public	Non Public	Not Enrolled	Total	
A	4	7,869,142.00	23,811	128	64	24,003	327.84
B	4	2,041,665.00	6,572	0	0	6,572	310.66
C	3	370,824.00	1,851	0	0	1,851	200.34
D	123	24,855,600.00	105,306	103	225	105,634	235.30
E	12	460,430.00	2,109			2,109	218.32
Total	146	35,597,661.00*	139,649	231	289	140,169	253.96

*different from total shown in Table XXII, Annual Statistic Report of Tennessee Education Department, by the addition of Lenoir City to this table.

A number of school systems undertook summer projects in addition to regular school term projects. Table 2 contains a summary of LEA's participation in regular and summer term programs.

Table II

LEAs Participating in Regular School

Term and Summer Title 1 Projects

	Regular School Term Only	Summer Only	Regular plus Summer	Total
No. LEAs	121	0	25	146

PART II

PROCESS AND OUTCOME OF TITLE I INSTRUCTIONAL ACTIVITIES

Local school systems have traditionally maintained considerable autonomy in the manner in which they operate the educational enterprise. With the increasing complexity of American society, and the need for school personnel to keep abreast of the latest programs available to help children learn, federally sponsored programs have added greatly to educational opportunities for the most needy children. ESEA Title I in Tennessee has provided extra resources for all school systems to meet a variety of needs related to educating culturally disadvantaged children. Systems have added staff, hired specialists, participated in much needed inservice training, operated special learning programs for children, purchased educational materials and multi-media aids, contracted for supplementary health and social services, and provided basic nutritional and clothing needs for poor children. The programs have involved all aspects of community life, including parents, state and federal agencies, other special projects, universities, cultural events, historical settings, local government, and other key segments of human, animal and plant ecology. Each school system has chosen its activities and performed the relevant tasks according to its greatest needs as perceived by the educational decision-makers. Most programs have been successful. This section of the report deals with the substance of Title I projects in Tennessee during FY 73.

The information reported will be in relation to school system size. Local systems vary substantially in size, resources, etc., and have been classified according to factors that describe the local areas served by

the agencies. The "Standard Metropolitan Statistical Area" (SMSA) description, provided by USOE, was used in the following determinations:

Classification A - The largest "core city" in the SMSA.

Classification B - All secondary cities within the SMSA that have populations of 50,000 or more. Also included in Class B are "older secondary cities" within the SMSA which have populations of less than 50,000. The "older secondary city" is characterized by a high incidence of low income families, antiquated and high density housing, low mobility of inhabitants, or other traits.

Classification C - All other rural or urban areas within the SMSA which have a population of fewer than 50,000. They can be either incorporated or unincorporated areas.

Classification D - All local educational agencies serving school districts in urban areas outside the SMSA which have populations between 2,500 and 49,999.

Classification E - All local educational agencies serving school districts in rural areas outside the SMSA which have populations below 2,500. (The above statements regarding classification categories were taken directly from the Tennessee 1965-66 Title I evaluation report.)

A listing of all school systems by SMSA classifications is included in the appendix. For purposes of this summary report all LEAs in categories A, B and E are included in the study. Only three schools are included in Classification C and all of these are located in the same region of the state. A separate reporting of these school programs would lead to erroneous conclusions regarding generalizability to the total state inasmuch as these LEAs do not represent different geographic areas.

A comparison of the population served, activities conducted, and results obtained among these three C systems and those LEAs in Classification D did not yield significant differences. Therefore, it was decided to include the three C systems among the D group for reporting purposes. From the total population of categories C and D school systems a random sample of 15 LEAs from each of the three grand divisions of Tennessee — east, middle, and west — were chosen for inclusion in this report. This sample comprises approximately 37% of the total number of LEAs in the Class C and D. After careful study of each local system's report, we are convinced that the random sample chosen will be representative of the population of Class C and D systems in the State of Tennessee. The rationale and methodology followed in our sampling procedure followed standard acceptable statistical rules and practices for research evaluation.

Instructional Activities

This section will report on the many activities related to cognitive development among culturally disadvantaged children. The types of projects in which the system engaged, methods by which progress was measured, special activities deemed most significant, impact of the projects on the regular school system, other federal agencies involved and the actual measured outcome of the projects will be reported.

Needs Assessment

The establishment of need for special programs to provide compensatory education for disadvantaged children has been shown in all of Tennessee in previous years (see previous state evaluation reports). Exactly which schools in the various districts and which children (needing compensatory services) remains an issue to be settled each year and for each special project. Determination of eligibility for any participating

school was based on the percentage of culturally disadvantaged pupils enrolled therein, as defined by state guidelines. The determination of deprivation for each child was conducted somewhat differently for each LEA. Following is a listing by LEA classification of the means by which children were screened for inclusion in Title I programs.

SMSA Classification A

Standardized test results

Teacher referral

Guidance Counselor referral

Principal referral

Family income

Psychological evaluation

Parental permission

Age eligibility

Attendance records

SMSA Classification B

Standardized test results

Teacher referral

Family income

Age eligibility

Prior participation in Title I projects

Location within designated Title I project Area

SMSA Classification C and D

Standardized test results

Teacher checklist (for preschool programs)

Principal and teacher conference

Pupil grade retention record

Family income

Personality inventory

Evaluation of home environment

Health and welfare department data

Local advisory committee recommendations

Other federal project data

School records of siblings

Reading retardation

SMSA Classification E

Family income

Age eligibility (for preschool programs)

Standardized test results

Records of non-promotion

Teacher made tests

Teacher observation

Parent request (low income family)

Cumulative records

Health and welfare department data

Local advisory committee recommendations

In all LEAs a combination of need assessment methods were used. At least three methods from the above listings were used by each school system. It is obvious that LEAs took very seriously the process of gathering concrete data about the children to be served by Title I. Not all the

information was strictly obje[illegible] but teachers and administrators put forth significant effort [illegible]ning the performance of the children they served. The validity [illegible]hoices of participants is borne out in the achievement pretest data reported in a later section.

Major Activities and Performance Objectives

Culturally deprived children tend to perform academically lower than their intellectual capability. Compensatory education programs are intended to overcome both general and specific educational deficits, prevent further deterioration of achievement and teach learning skills for effective cognitive growth in later years. Educators contend that success in school and later life is directly related to language development and those skills associated with reading, writing and oral expression. There is a pervasive opinion that programs for younger children have more payoff in later years. The school systems in Tennessee have responded programmatically to these well established attitudes. The preponderance of compensatory programs during FY 73 included kindergarten readiness and remedial reading for early and middle elementary grades. Also included were remedial mathematics, cultural enrichment, special education for the learning disabled culturally disadvantaged, and special and remedial science projects. Many of the programs were designed to broaden the ecological perspective and experiential base of the children by including a large number of field trips, special program events, multimedia presentations, performing in all levels of drama and utilizing the most recent classroom learning methods and devices.

Each of the various activities was specifically related to objective criteria of performance. In most cases the expected change was one month's growth for each month of participation as measured by standardized

achievement tests. In other projects lesser academic growth was expected. In some cases criteria-based performance instruments were constructed by teachers or materials manufacturers to coincide directly with the activities being performed. Most of the kindergarten programs were evaluated by this method.

The following list indicates the major activities that comprised the academic component of compensatory education under Title I in Tennessee during FY 73. The percentage of school systems undertaking each activity is also tabulated:

SMSA Classification A

Activity	Percent of LEAs					
	K	Early Elem.	Mid Elem.	Jr. Hi	Sr. Hi	Adult	Mixed or not specified
Kindergarten	100						
Cultural enrichment							25
Reading		75	75	75	75		
Language arts		50	50	25	25		
Mathematics		75	75	50	50		
Industrial arts							25
Physical ed./recreation		25	25				
Adult ed. for dropouts						25	
Natural science							25
Special activities for handicapped							25

SMSA Classification B

Activity	Percent of LEAs
Kindergarten	100
Reading (early elem.)	75
Reading (middle elem.)	25
Environmental ed.	25
Perceptual development	25
Social development	25
Language development	25
Basic concepts development	25

SMSA Classification C and D

Activity	Percent of LEAs
Pre-kindergarten	5
Kindergarten	58
Reading (early elem.)	85
Reading (middle elem.)	83
Reading (jr. high)	60
Math (middle elem., jr. high)	44
Music (early, middle elem.)	4
Vocational for dropout prone pupil (jr., sr. high), science, English, soc. studies, Part C	3

SMSA Classification E

Activity	Percent of LEAs
Kindergarten	75
Reading (early elem.)	100
Reading (middle elem.)	100
Language development (jr.high)	62
Language development (sr.high)	25
Math (early & middle elem.)	50
Math (jr. high)	25

Most, but not all, LEAs undertook at least one academic project as part of the compensatory education plan. As the data above indicate the larger systems were able to engage in a wider variety of activities than the smaller ones. Following is a tabulation of the number of academic projects undertaken per LEA and the percentage of LEAs engaging in each specific number of projects:

SMSA Classification A

Number of Academic Projects/LEA	Percent of LEAs
3	50
6	25
10	25

SMSA Classification B

Number of Academic Projects/LEA	Percent of LEAs
2	100

SMSA Classification C and D

Number of Academic Projects/LEA	Percent of LEAs
0	5
1	16
2	23
4	23
5	16
7	4
8	7
9	6
	100

SMSA Classification E

Number of Academic Projects/LEA	Percent of LEAs
2	62
3	38
	100

Methods of Outcome Assessment

The outcome of any project or course of study can only be determined by using some measurement device. Daily quizzes, weekly tests, six weeks and semester examinations are the most common methods by which teachers assess the outcome of academic courses. These instruments, whether teacher-made or textbook supplements, measure skills or information learned and usually place students in relative standing with their classmates or local historical norms. Teacher evaluation of pupil progress during a school year is determined not only by the test scores compiled but also by observations and intuitive judgments of

growth and change. These methods may be quite reliable and valid, but the results are sometimes difficult to defend to a doubting pupil, parent or principal.

During recent years increasing attention has been paid to the concept of accountability and objective assessment in education. Although nationally standardized achievement tests have been used for several decades to meet state or local requirements, little concern was paid to their relevancy for local programming prior to ESEA. Recently local school authorities have become quite sophisticated in the use and interpretation of standardized tests. Most school systems used national tests to evaluate the effectiveness of their Title I academic programs in FY 73. These tests were supplemented in some instances by teacher-made devices and/or manufacturer or consultant produced performance-based criteria instruments. There were some reported programs which showed no indication of objective evaluation. These were mostly kindergarten, pre-kindergarten and vocational projects.

Following is shown the measurement instruments used by LEAs in the various SMSA classifications:

SMSA Classification A

Measurement Instruments	Percent of LEAs
Kindergarten	
Boehm Test of Basic Concepts	50
Visual-Motor Integration Test of Perceptual Development (VMI)	25
Checklist of Social and Emotional Adjustment	25
Metropolitan Readiness Test	25
Lebovitz-Tanis Behavior Rating Scale	25
Checklist of Motor Skill Development	25
Teacher Questionnaires	100
Parent Questionnaires	100
Grades 1-3	
Stanford Diagnostic Reading Test	25
Stanford Diagnostic Math Test	25
Checklist of Social and Emotional Adjustment	25
Metropolitan Achievement Test - Reading - Math	50
Behavior Rating Scale (local)	25
Word Opposites Knowledge Test (local)	25
Oral Language Knowledge Test (local)	25
Reading Attitude Scale (local)	25
The Prescriptive Reading Inventory	25
Attitude Rating Scale (local)	25
Wepman Auditory Discrimination Test	25
Marianne Frostig Developmental Test of Visual Perception	25
Teacher Questionnaire	100
Parent Questionnaire	100

Grades 4-6

Stanford Diagnostic Reading Test	25
Stanford Diagnostic Math Test	25
Checklist for Social and Emotional Adjustment	25
Vocational Information Survey (local)	25
Comprehensive Test of Basic Skills (CTBS) Reading	25
Metropolitan Achievement Test - Reading - Math - Language	50
Reading Attitude Scale (local)	25
Teacher Attitude Survey (local)	25
Attitude Rating Scale (local)	25
Behavior Rating Scale (local)	25
Self-image Performance Scale (local)	25
Informal Reading Inventory	25
California Achievement Test - 1 (Reading - Math)	25
Teacher Questionnaire	100
Parent Questionnaire	100

Grades 7-9

Stanford Diagnostic Reading Test	25
Checklist of Social and Emotional Adjustment	25
Vocational Information Survey	25
Comprehensive Test of Basic Skills - (CTBS) Math - Reading	25

California Reading Test	25
Alan Cohen Observation Technique	25
Stanford Diagnostic Reading Test	25
Metropolitan Achievement Test	
Math - Reading	25
Student Opinion Questionnaire	25
California Achievement Test	
Math - Reading	25
Reading for Meaning (Series Test)	25
Teacher Attitude Survey (local	25
Behavior Rating Scale (local)	25
Teacher Questionnaire	100
Parent Questionnaire	100
Grades 10-12	
Stanford Diagnostic Reading Test	25
Checklist of Social and Emotional Adjustment	25
California Achievement Test	25
Reading for Meaning (Series Test)	25
Behavior Rating Scale (local)	25
Teacher Questionnaire	100
Parent Questionnaire	100
Adult	
Adult Basic Learning Evaluation Test	
(Program for 16-18 year old dropouts)	25

SMSA Classification B

Measurement Instruments	Percent of LEAs
Kindergarten	
Kindergarten Skill Checklist (local)	25
Teacher Questionnaire	25
Organizational Climate Description Questionnaire (OCDQ)	25
Metropolitan Reading Readiness Test	25
Grades 1-3	
Metropolitan Achievement Test (Word Knowledge - Reading - Word Analysis)	75
Teacher Questionnaire	25
California Achievement Test - Reading	25
Organizational Climate Description Questionnaire (OCDQ)	25
Stanford Achievement Test	25
Peabody Picture Vocabulary Test	25
Peabody Individual Achievement Test	25
Grades 4-6	
Metropolitan Achievement Test (Word Knowledge - Reading - Word Analysis)	75
Teacher Questionnaire	25
California Achievement Test - Reading	25
Organizational Climate Description Questionnaire (OCDQ)	25
Stanford Achievement Test	25

Grades 7-9	
Gates-MacGinitie	25
Teacher Questionnaire	25
California Achievement Test - Reading	25
Metropolitan Achievement Test	
(Entire Battery)	25
Stanford Achievement Test	25
Grades 10-12	
Gates-MacGinitie	25
Teacher Questionnaire	25

SMSA Classification C and D

Measurement Instrument	Percent of LEAs
Kindergarten	
California TOBE	4
Peabody Picture Vocabulary Test	11
Metropolitan Readiness Test	35
Harper & Row Pre-Reading Test	2
Caldwell Pre-School Inventory	2
Steck Vaughn Readiness	4
Psychomotor Tests	2
ITPA	2
Inventory Learning Skills	2
Teacher designed	31
Grades 1-3	
Metropolitan Achievement Test - Reading	27
Stanford Reading Test	21

California Achievement Test	15
Gates MacGinitie Reading	21
Reading Preference Picture Test	2
TOBE - Reading	2
Developmental Reading	2
Teacher Designed - Reading	6
Durrell Reading & Listening	2
Frostig - Visual Motor Perception	2
Teacher Designed - Music	4
Metropolitan Achievement Test - Math	15
Stanford Achievement - Math	4
Metropolitan Achievement - English	2
Metropolitan Achievement - Science	2

Grades 4-6

Metropolitan Achievement Test - Reading	29
Stanford Achievement	23
California Achievement Test	15
Gates MacGinitie Test - Reading	19
Metropolitan Achievement Test - Science	4
Metropolitan Achievement Test - Math	17
Stanford Achievement Test - Math	6
Durrell Reading & Listening	2
Metropolitan Achievement Test - English	2
Stanford Diagnostic - Language Arts	2
Teacher Designed	6

Grades 7-12

Metropolitan Achievement Test - Reading	21
Stanford Achievement - Reading	21
California Reading Test	10
Nelson Reading Test - Reading	2
Gates MacGinitie - Reading	13
Metropolitan Achievement Test - Science	4
Metropolitan Achievement Test - English	2
Iowa Silent Reading Test - Reading	2
Metropolitan Achievement Test - Math	23
Stanford Achievement Test - Math	6
ABLE Test - Math	2
Teacher Designed - Social Studies	4
Teacher Designed - Math	4
Teacher Designed - Reading	4
Minnesota High School Achievement Examination Language Arts	2
Stanford Diagnostic - Language Arts	2
Teacher Designed - Vocational Training	10

SMSA Classification E

Measurement Instruments	Percent of LEAs
Kindergarten	
Teacher Checklist for Readiness	62
Peabody Picture Vocabulary Test	12
Grades 1-3	
Metropolitan Achievement Test - Reading	62
Metropolitan Achievement Test - Math	50
Gates MacGinitie Reading Test	25
Reading for Understanding	12
Stanford Achievement Test	12
Grades 4-6	
Metropolitan Achievement Test - Reading	62
Metropolitan Achievement Test - Math	50
Reading for Understanding	12
Gates MacGinitie Reading Test	25
Stanford Achievement Test	12
Grades 7-9	
Metropolitan Achievement Test - Reading	38
Metropolitan Achievement Test - Math	38
Stanford Achievement Test	12
Gates MacGinitie Reading Test	12
Reading for Understanding	12
Differential Aptitude Test	12
Grades 10-12	
Reading for Understanding	12
Differential Aptitude Test	12

Most Valuable Title I Activities

In the evaluation reports completed by each LEA was a section in which the systems described the most significant events and activities of the year. School authorities had little difficulty in identifying a wide array of key activities which they perceived as enhancing the Title I projects. Some respondents pointed out various changes in children as the most significant happening, while others identified new methods of instruction, personnel additions, cultural enrichment activities, community/parent involvement, school organization/climate changes, teaching materials acquisition, and pupil diagnosis efforts as being the most outstanding happenings of the school year. A significant number of LEAs considered the entire package of supporting services as a unit and reported it as the most valuable Title I activity.

Table III lists the categories of valued activities and gives a frequency count of the number of nominations for each activity in the LEA reports:

Table III

Most Valued Activities of Title I FY 73

Valued Activity as Reported by LEA	SMSA Classifications			
	A	B	C & D	E
	Number of Nominations			
Changes in children (behavioral and academic	0	0	7	3
New Instructional Methods	10	2	41	4
Adding Competent Staff	3	2	5	5
Cultural Enrichment Activities	1	0	6	0
Community/parent involvement	4	0	0	1
School organization/climate change	0	2	5	9
Acquiring New Teaching Aids/materials	3	0	14	2
Diagnosing Pupil Problems	3	0	2	4
Building renovations/changes	0	0	0	1
Supportive Services (as a whole)	4	1	8	0

Other Federal Projects Involved

Title 1 guidelines encourage each school system to be aware of all other federal projects operating in the district and to coordinate and collaborate with those programs wherever possible. A majority of LEAs in Tennessee (62%) have taken advantage of the opportunity to broaden the scope of vital human development services available to disadvantaged children. In former years schools were closed to outside influence and children suffered in silence. Due to limited budgets and personnel shortages school personnel had no effective mechanism to utilize the other resources in the ecological system of the community. Presently the success of any one human service activity depends significantly on the extent to which it effectively interfaces with other delivery systems serving the same target population. Headstart, Neighborhood Youth Corps, Community Action Agencies, Title 1, Food Stamps, Day Care, etc. are all committed to improving the quality of life for residents of substandard neighborhoods. The sharing of material and human resources enhances the outcome for the participants.

In Tennessee during FY 73, Title 1 programs intertwined with other federally sponsored projects in a variety of ways. Each community was somewhat unique in its description of joint activities. Some LEAs collaborated with only one other agency; some with as many as four. In a significant number of LEAs (19%) other ESEA programs were integrally involved with Title 1 projects. Following is a listing of the different ways in which other federal projects meshed with Title 1 activities;

1. OEO Headstart program — collaborative kindergarten programs, including nutritious meals, materials, teachers, transportation and activities; shared consultation, inservice funds.
2. Neighborhood Youth Corps — hired Title 1 participants; Title 1 programs hired NYC participants.
3. Community Action Agencies — operated neighborhood service centers which provided liaison and information distribution services between school and neighborhood, increased parent involvement; members of Title 1 Advisory Committee; provided eligibility identification services; provided transportation, health services, materials, teacher aides.
4. Federal lunch program — for Title 1 children.
5. ESEA Title II — purchased books used by Title I children.
6. ESEA Title III — provided screening, diagnostic and learning prescriptions for learning disabled Title I children.
7. SSA Title IV-A — shared learning disabilities coordinator to work with teachers of target handicapped children; day care project coordinates certain activities for Title I children, eg, transportation, food services.
8. Career Education Program (Tennessee Appalachian Education Cooperative) — provided training for teachers and aides
9. NDEA Title III — purchased educational materials.

Measured Outcome of Title I Instructional Activities

Pre- and posttesting using standardized achievement tests constituted the major aspect of evaluation in almost all Title I programs. This section contains the results of that testing procedure for reading and in some instances mathematics achievement. Data are presented separately for each SMSA Classification category.

SMSA Classification A. Pre- and posttest results in reading were reported by all LEAs in Classification A. These data are presented by grade level. Mean gain scores for Title I students are presented in Table V. The data are presented in graphic form in Figures 2 and 3.

Table IV

Reading Achievement Test Results for LEAs Reporting Pre and Posttest Data. SMSA Classification A

Grade	Test	% LEAs	Title I			Non Title I Ss in Title I Schools		
			Pre	Post	Gain	Pre	Post	Gain
2	SDRT	25	1.4	1.8	.4			
3	SDRT	25	1.9	2.4	.5			
4	SDRT	25	2.2	2.8	.6			
	CAT - Voc	25	2.0	2.9	.9			
	CAT - Comp	25	2.5	3.3	.8			
5	SDRT	25	2.6	3.2	.6			
	MAT - Total Reading	25	2.8	3.5	.7	4.3	4.7	.4
	MAT - Word Meaning	25	2.9	3.5	.6	4.3	4.8	.5
	MAT - Read	25	3.0	3.7	.7	4.4	4.6	.2
6	SDRT	25	2.9	3.3	.4			
	CAT - Voc	25	2.8	4.2	1.4			
	CAT - Comp	25	3.3	4.8	1.5			
7	SDRT	25	4.0	4.9	.9			
	CTBS*	25	3.3	3.4	.1			
8	SDRT	25	4.5	5.3	.8			
	CRT**	25	3.9	5.7	1.8			
9	SDRT	25	4.5	5.4	.9			
10	SDRT	25	5.0	6.2	1.2			
11	SDRT	25	5.7	6.9	1.2			
12	SDRT	25	6.1	6.8	.7			

Notes: All scores reported in Grade Equivalents

SDRT - Stanford Diagnostic Reading Test

CAT - California Achievement Test

MAT - Metropolitan Achievement Test

CTBS - Comprehensive Test of Basic Skills

CRT - California Reading Test

* - Sample includes 7th and 8th grade pupils

** - Sample includes 7th, 8th and 9th grade pupils

Table V

Title I Pupils' Mean Gain Scores in Reading Achievement for LEAs Reporting Pre- and Posttest Data.

SMSA Classification A

Grade	Mean Grade Equivalent Gain Score
2	.40
3	.50
4	.77
5	.65
6	1.10
7	.93
8	.90
9	1.35
10	1.20
11	1.20
12	.70

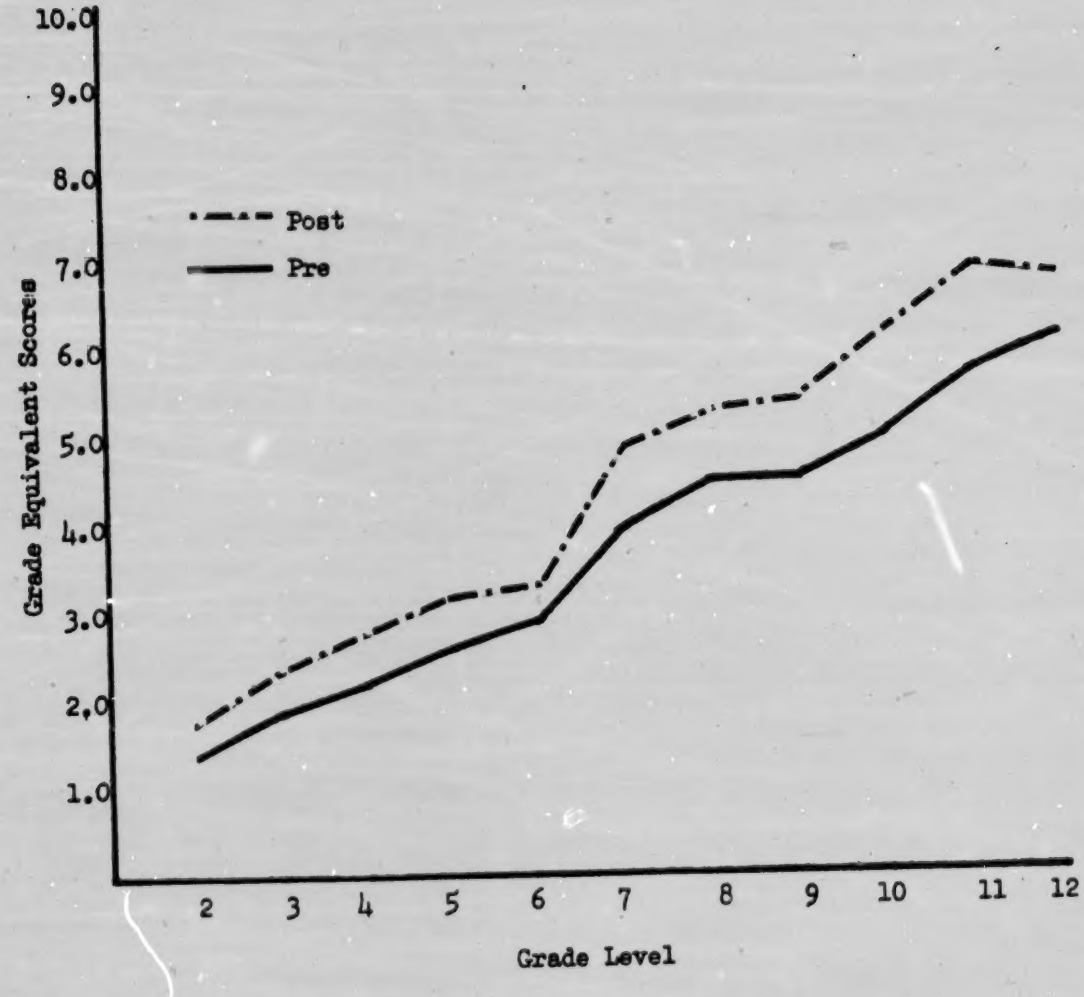

Figure 2 Stanford Diagnostic Reading Test Pre- and Posttest Results for Title I Students.

SMSA Classification A

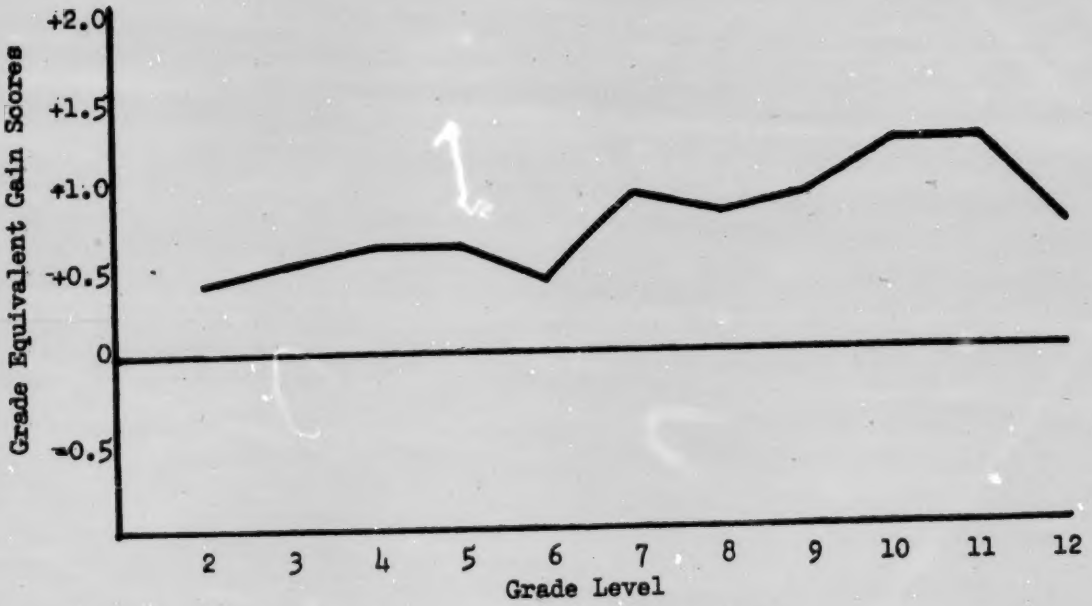

Figure 3 Stanford Diagnostic Reading Test Gain Scores for Title I Students. SMSA Classification A

Analysis of the data presented in Tables IV and V reveals that positive gains occurred at all levels in reading achievement. The positive gains ranged from .1 to 1.8 grade equivalent years with a mean of .84 and a median of .75 grade equivalent years. Thirty six percent of the gains reported were 1.1 grade equivalent years or above. Fifty five percent were from .5 to 1.0 grade equivalent years and nine percent were .4 grade equivalent years or below. A total of 91% of the grade levels reported a positive gain of .5 grade equivalent years or greater in reading achievement. The levels reporting the greatest mean gain in reading achievement were grade 6 (1.1), grade 9 (1.35), grade 10 (1.2) and grade 11 (1.2). Grade 2 (.40) reported the lowest mean gain.

Many factors could account for the wide range of positive gains reported. Test differences, testing difficulties, duration of the program, length of time between pre- and posttesting, sample size, the degree to which the content of the various standardized tests correlated with the content and objectives of the programs, and program effectiveness.

Meaningful comparison of Title I and non-Title I student gains in SMSA Classification A systems was not possible due to the small number of pupils on whom reading achievement data were reported (grade 5 only). Additional data would have provided an opportunity to obtain a differential measure of the degree to which the Title I programs affected student achievement in reading.

In addition to the grade equivalent scores reported in Table IV data were submitted in stanine scores and in mean raw scores. The raw score data will not be presented here as they are not standard scores

but basically represent the number of items correct on a test. These data cannot be appropriately used to make comparisons.

Gains were recognized in the stanine score data by a decrease in the percent of students in stanines 1-3 from pre-to posttest and an increase in percent of students in stanines 4 and above from pre- to posttest. These data are presented in Table VI.

Table VI

Reading Achievement Test Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification A

Grade	Test	Range of Stanine Scores	Percent of Title I Students in Stanine Range		
			Pre	Post	Gain
2	Metropolitan Achievement	1-3	82	62	-20
		4-9	18	38	+20
3	Metropolitan Achievement	1-3	94	80	-14
		4-9	6	20	+14
4	Comprehensive Test of Basic Skills	1-3	95	83	-12
		4-9	5	17	+12
5	Comprehensive Test of Basic Skills	1-3	88	82	- 6
		4-9	12	18	+ 6
6	Comprehensive Test of Basic Skills	1-3	91	76	-15
		4-9	9	24	+15

The data shown in Table VI, page 39, indicate gains at all reported levels ranging from 6% to 20% with a mean of 13 and a median of 14. Data from an insufficient number of students were reported to allow a comparison of Title I and non Title I student gains.

Pre- and posttest results in mathematics which were reported by LEAs in Classification A are presented in Table VII. Mean gain scores for Title I students are presented in Table VIII, page 41. Figure 4, page 42, also reports arithmetic achievement results in graphic form.

Analysis of the data in Tables VII and VIII indicates that positive gains occurred in math achievement in grades 2 through 6. A negative gain score was obtained for grades 7 and 8. It is important to note that the data reported for grades 7 and 8 represent only one small sample from one LEA and do not represent a general trend in grades 7 and 8 throughout the LEAs in Classification A. The positive gains reported in Table VII ranged fro .6 to 1.4 grade equivalent years with a mean of .84 and a median of .7 g de equivalent years. Twenty five percent of the positive gains were 1.1 grade equivalent years or above, 75% were .6 to 1.0 grade equivalent years. No positive gains reported in math for Title I students were below .5 grade equivalent years. The levels reporting the greatest positive mean gain were grade 6 (1.35) and grade 3 (1.1). The lowest positive mean gain reported was for grade 2 (.6).

Insufficient pupil data were reported to allow a comparison of Title I and non Title I student achievement in mathematics.

Table VII

Mathmatics Achievement Test Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification A

Grade	Test	% LEAs	Title I			Non Title I Ss in Title I Schools		
			Pre	Post	Gain	Pre	Post	Gain
2	SDAT	25	1.8	2.6	.6			
3	SDAT	25	2.4	3.5	1.1			
4	SDAT	25	2.8	3.5	.7			
	CAT - Comp	25	2.5	3.2	.7			
	CAT - Concepts	25	2.4	3.2	.8			
5	SDAT	25	3.8	4.5	.7			
	MAT TM	25	3.3	4.0	.7	4.1	5.1	1.0
	MAT - Comp	25	3.7	4.5	.8	4.5	4.5	0
	MAT - Concept	25	3.3	3.9	.6	3.9	5.1	1.2
	MAT P.S.	25	3.3	4.0	.7	4.2	4.8	.6
6	CAT - Comp	25	3.8	5.2	1.4			
	CAT - Concept	25	3.6	4.9	1.3			
7-8	CTBS	25	3.9	3.7	-.2			

Notes: All scores report in Grade Equivalents

SDAT - Stanford Diagnostic Arithmetic Test

CAT - California Achievement Test

MAT - Metropolitan Achievement Test

CTBS - Comprehensive Test of Basic Skills

Table VIII

Mean Grade Equivalent Gain Scores in Mathmatics Achievement for LEAs Reporting Pre- and Posttest Data. SMSA Classification A

Grade	Mean Gain Scores
2	.60
3	1.1
4	.73
5	.70
6	1.35
7-8	-.2

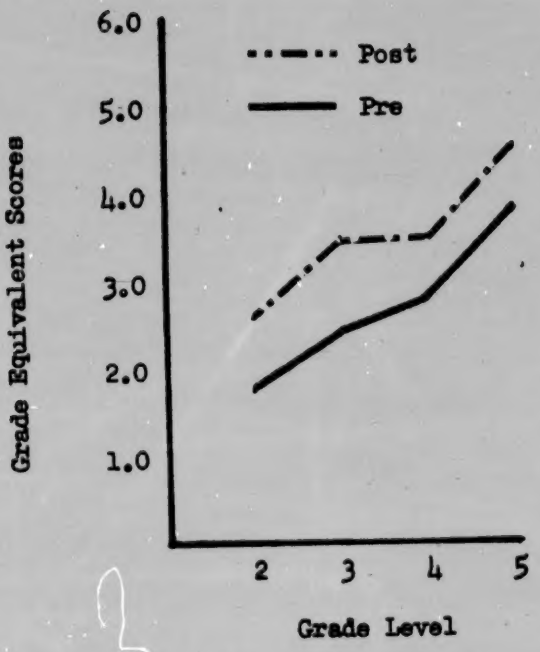

Figure 4 Stanford Diagnostic Arithmetic Test Pre- and Posttest Scores for Title I Students. SMSA Classification A

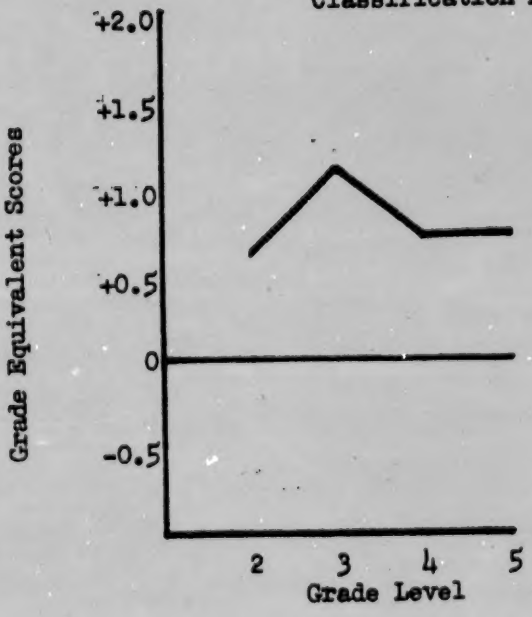

Figure 5 Stanford Diagnostic Arithmetic Test Gain Scores for Title I Students. SMSA Classification A

SMSA Classification B. Reading achievement test scores for LEAs in SMSA Classification B reporting pre- and posttest scores are presented in Table IX, page 44. Mean gain scores in reading achievement by grade level are presented in Table X, page 45, and Figure 7, page 47.

Analysis of these data reveals that a positive gain was achieved at all reported levels. The gains ranged from .2 to 2.0 grade equivalent years with both a mean and median of .8. Sixteen percent of the gains reported were 1.1 grade equivalent years or above. While 76% ranged from .5 to 1.0 grade equivalent years, 8% of the reported gains were .4 grade equivalent years or below. A total of 92% of the gains were .5 grade equivalent years or greater in reading achievement. The levels reporting the greatest mean gain were grade 10 (1.3) and grade 8 (1.1). The lowest mean gain (.6) was reported by grades 5, 6, 7 and 9.

Data was reported for grades 2-8 using the Stanford Achievement Test (SAT) which allows achievement comparison of Title I and non-Title I students attending the same schools. These data are shown in Table IX, page 44, and Figure 6, page 46. Using only the Title I data for which non Title I data was provided a mean gain of .7 grade equivalent years was obtained with a range from .4 to 1.0, and a median of .7 grade equivalent years. The mean gain for non-Title I students was .7 and ranged from .4 to 1.1, with a median of .6 grade equivalent years. These data are presented in Table XI, page 45, and Figure 7, page 47.

Table IX

Reading Achievement Test Scores for LEAs Reporting Pre- and Posttest Data, SMSA Classification B

Grade	Test	% LEAs	Title I			Non Title I Ss in Title I Schools		
			Pre	Post	Gain	Pre	Post	Gain
2	SAT	25	1.5	2.3	.8	1.6	2.7	1.1
	MAT	25	1.7	2.4	.7			
	CAT	25	1.4	2.3	.9			
3	SAT	25	1.9	2.9	1.0	2.8	3.6	.8
	MAT	25	3.0	3.6	.6			
	CAT	25	2.3	3.1	.8			
	PIAT - RR	25	1.9	2.9	1.0			
	PIAT - RC	25	2.4	3.5	1.1			
4	SAT	25	2.5	3.3	.8	3.2	4.3	1.1
	MAT	25	2.8	3.7	.9			
	CAT	25	3.3	3.9	.6			
5	SAT	25	3.6	4.0	.4	4.3	4.9	.6
	CAT	25	4.0	4.8	.8			
6	SAT	25	4.3	4.9	.6	5.3	5.8	.5
	CAT	25	5.1	5.6	.5			
7	SAT	25	5.2	5.9	.7	6.1	6.5	.4
	CAT	25	5.8	6.3	.5			
8	SAT	25	5.8	6.4	.6	7.2	7.7	.5
	CAT	25	6.8	8.4	1.6			
9	GMRT - Speed	25	3.9	4.1	.2			
	GMRT - Voc	25	3.8	4.4	.6			
	GMRT - Comp	25	3.1	4.1	1.0			
10	GMRT - Speed	25	3.6	5.6	2.0			
	GMRT - Voc	25	3.8	4.3	.5			
	GMRT - Comp	25	2.9	4.2	1.3			

Notes: All scores reported in Grade Equivalents
MAT - Metropolitan Achievement Test

SAT - Stanford Achievement Test

CAT - California Achievement Test

PIAT - Peabody Individual Achievement Test

GMRT - Gates MacGinitie Reading Test

Table X

Title I Pupils' Mean Reading Achievement Gain Scores for LEAs Reporting Pre- and Posttest Data. SMSA Classification B

Grade	Mean Grade Equivalent Gain Score
2	.8
3	.9
4	.8
5	.6
6	.6
7	.6
8	1.1
9	.6
10	1.3

Table XI

Comparison of Title I and non Title I Stanford Achievement Test Reading Gain Scores in Grade Equivalent Years for Grades 2-8. SMSA Classification B

	Title I	Non Title I
Mean Gain	.7	.7
Range	.4 to 1.0	.4 to 1.1
Median	.7	.6

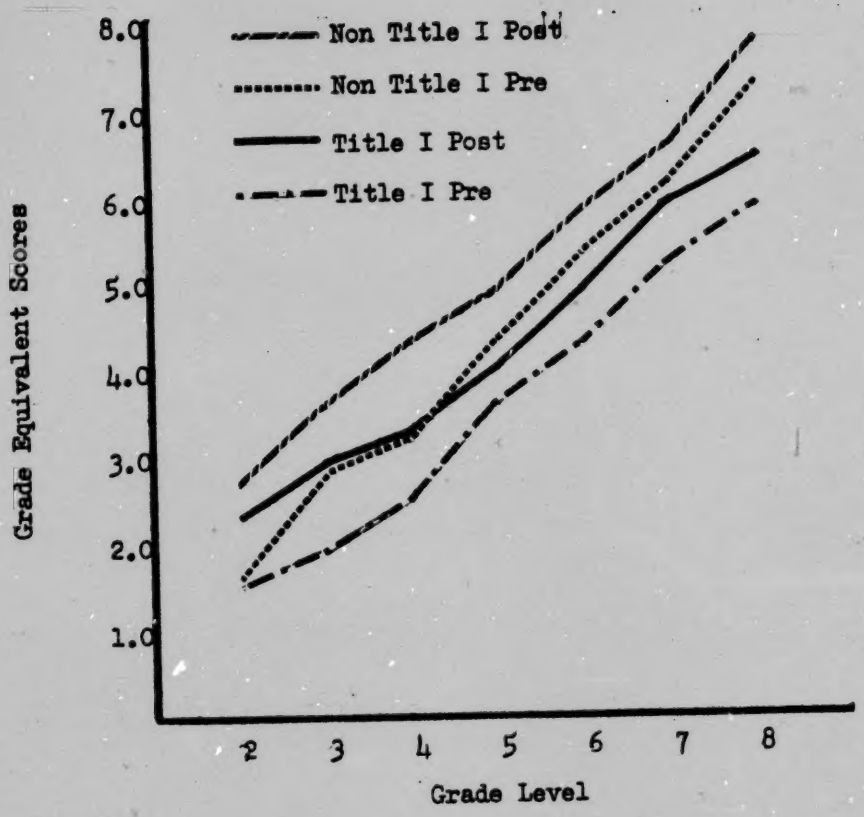

Figure 6 Stanford Achievement Test Reading Pre- and Posttest Results for Title I Students.

SMSA Classification B

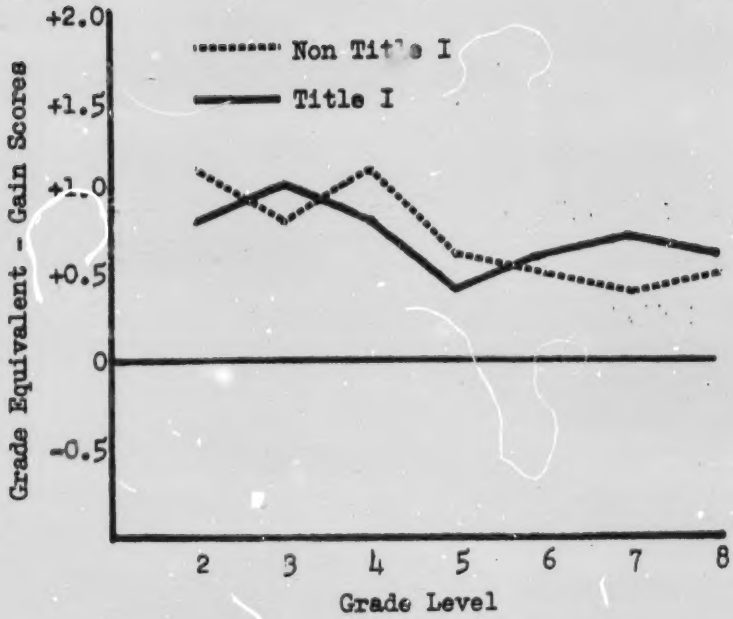

Figure 7 Stanford Achievement Test Reading Gain Scores for Title I Students. SMSA Classification B

The data presented in Table XI indicate that this sample of Title I students achieved an equal amount of gain in grade equivalent years over the same period of time as a sample of non Title I students attending the same schools. The students participating in Title I activities are doing so partly as a result of their failure to make adequate gains in school achievement. These data indicate that the Title I program is providing services which result in the participants making achievement gains comparable to gains made by non Title I students.

Additional analysis of these data in Table IX, page 44, indicate that 86% of the Title I gain scores reported were .5 to 1.0 grade equivalent years and 14% were .4 grade equivalent years or below. Non Title I data indicates that 29% of the gain scores were 1.1 grade equivalent years or above, 57% were from .5 to 1.0 grade equivalent years, and 14% were .4 grade equivalent years or below. These data are presented in Table XII, page 49, and indicate that, although the Title I and non Title I students achieved equivalent mean gain scores (See Table XI, page 45), the non Title I students achieved a higher percentage of gain scores 1.1 grade equivalent years or above (29%) than the Title I students. It should be noted, however, that the same percentage (86%) of Title I and non Title I gain scores were .5 grade equivalent years or greater.

Table XII

Comparison of Various Ranges of Stanford Achievement Test Reading Gain Scores for Grades 2-8.

SMSA Classification B

Range of Grade Equivalent Gain Scores	Percent of Gain Scores Reported in Table IX	
	Title I	Non Title I
1.1 or above	0	29
.5 to 1.0	86	57
.4 or below	14	14
Totals	100	100

SMSA Classification C and D. Reading achievement test results for LEAs reporting pre- and posttest data for SMSA Classifications C and D are reported in Table XIII, page 51. Mean gain scores by grade level are reported in Table XIV, page 52. Analysis of these data indicates that a positive gain was achieved at all grade levels by Title I students. The overall mean gain was .73 grade equivalent years with a range from .2 to 1.3 and a median of .7 grade equivalent years. Levels which reported the greatest mean gain were grade 3 (.80) and grade 7 (.80). The lowest mean gain was reported by grade 8 (.60).

Non Title I students in Title I schools achieved a mean gain of .73 grade equivalent years with a range of -.1 to 1.3 and a median of .75 grade equivalent years. Greatest mean gains were reported by grade 4 (.93) and grade 2 (.85). Grade 8 reported the lowest mean gain (.48). Whole system data indicates a mean gain of .73 grade equivalent years with a range from .1 to 1.3 and a median of .7 grade equivalent years with a range from .1 to 1.3 and a median of .7 grade equivalent years. Highest mean gains were reported by grades 2 (.85) and 5(.80). Lowest mean gain was reported by grade 8 (.60).

These data indicate that, although Title I students in Classifications C and D were not achieving overall at the same grade levels as the non Title I students, they were making, as a result of Title I participation, an equal amount of progress in terms of gain on standardized reading achievement tests.

Table XIII

Reading Achievement Test Results for LEAs Reporting Pre- and Posttest Data, SMSA Classifications C & D

Grade	Test	% LEAs	Title I			Non-Title I Ss in Title I Schools			Whole System		
			Pre-test	Post-test	Gain scores	Pre-test	Post-test	Gain scores	Pre-test	Post-test	Gain scores
2	MAT	13	1.6	2.5	+0.9	2.3	3.2	+0.9	2.0	2.9	+0.9
	GMRT	11	1.5	2.0	+0.5	2.1	2.8	+0.7	1.8	2.4	+0.6
	CAT	2	1.3	2.6	+1.3	1.7	2.6	+0.9	1.5	2.6	+1.1
	SAT	13	1.6	2.0	+0.4	1.9	2.8	+0.9	1.7	2.5	+0.8
3	MAT	8	2.4	3.1	+0.7	3.4	3.9	+0.5	3.2	3.7	+0.5
	GMRT	11	2.3	3.4	+1.1	3.0	3.6	+0.6	3.0	3.5	+0.5
	CAT	4	2.3	3.1	+0.8	3.1	4.1	+1.0	2.8	3.6	+0.8
	SAT	13	2.0	2.6	+0.6	2.7	3.6	+0.9	2.6	3.3	+0.7
4	MAT	17	3.5	4.1	+0.6	4.0	5.0	+1.0	3.6	4.5	+0.9
	GMRT	4	3.1	3.6	+0.5	4.1	4.7	+0.6	3.8	4.4	+0.6
	CAT	6	2.7	3.8	+1.1	3.7	4.9	+1.2	3.8	4.5	+0.7
	SAT	13	2.7	3.3	+0.6	3.5	4.4	+0.9	3.3	4.2	+0.9
5	MAT	20	3.5	4.3	+0.8	4.8	5.5	+0.7	4.5	5.2	+0.7
	GMRT	8	3.6	4.1	+0.5	5.0	5.3	+0.3	4.3	4.9	+0.6
	CAT	4	3.8	5.0	+1.2	4.9	6.2	+1.3	4.4	5.6	+1.2
	SAT	11	3.4	4.0	+0.6	4.4	5.2	+0.8	4.1	4.8	+0.7
6	MAT	13	4.1	4.8	+0.7	5.6	6.6	+1.0	5.2	6.1	+0.9
	GMRT	8	4.0	4.5	+0.5	5.6	6.3	+0.7	5.4	5.9	+0.5
	CAT	6	4.2	4.9	+0.7	5.7	6.8	+1.1	5.2	6.1	+0.9
	SAT	13	3.9	4.6	+0.7	5.4	5.8	+0.4	4.9	5.5	+0.6
7	MAT	16	4.9	5.6	+0.7	7.0	7.6	+0.6	6.2	7.0	+0.8
	GMRT	11	4.4	5.3	+0.9	7.3	7.4	+0.1	6.4	6.9	+0.5
	CAT	4	5.2	6.4	+1.2	7.3	8.6	+1.3	6.5	7.8	+1.3
	SAT	4	4.4	4.8	+0.4	5.7	5.6	-0.1	5.3	5.7	+0.4
8	MAT	13	5.3	5.9	+0.6	7.6	7.9	+0.3	7.0	7.4	+0.4
	GMRT	6	4.9	5.6	+0.7	7.4	8.6	+1.2	7.1	8.3	+1.2
	CAT	6	5.7	6.6	+0.9	8.2	8.4	+0.2	6.9	7.6	+0.7
	SAT	4	5.8	6.0	+0.2	7.1	7.3	+0.2	7.1	7.2	+0.1

Notes: All scores reported in Grade Equivalents

MAT - Metropolitan Achievement Test

GMRT - Gates MacGinitie Reading Test

CAT - California Achievement Test

SAT - Stanford Achievement Test

Table XIV

Mean Gain Scores in Reading Achievement for LEAs Reporting Pre- and Posttest Data, SMSA Classification C and D

Grade	Mean Grade Equivalent Gain Score		
	Title I	Non-Title I	Whole System
2	.78	.85	.85
3	.80	.75	.63
4	.70	.93	.78
5	.78	.78	.80
6	.65	.80	.73
7	.80	.53	.75
8	.60	.48	.60
Grand Mean	.73	.73	.73

The portion of reading achievement test data which was obtained by using the Metropolitan Achievement Test is presented in Figures 8, 9 , and 10, pages 53, 54, and 55. These specific test data illustrate the point made in the previous paragraph. That is, Title I students, on pretest (Fig. 8) and on posttest (Fig. 9), were consistantly lower than non Title I and whole system students on absolute achievement test scores. However, gain scores obtained for all three groups (Fig. 10) did not differ significantly and were within the same general range. Apparently, the historical trend for culturally disadvantaged children to fall further behind in achievement as they progress farther in school has been broken by the Title I programs in these schools.

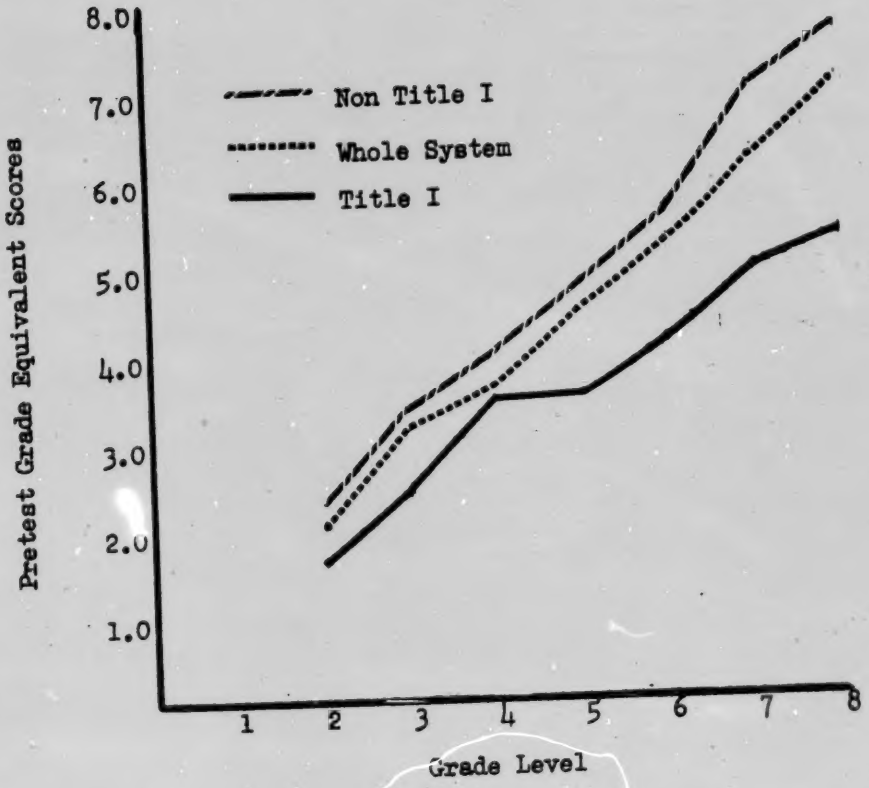

Figure 8 Metropolitan Reading Achievement Pretest Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification C and D

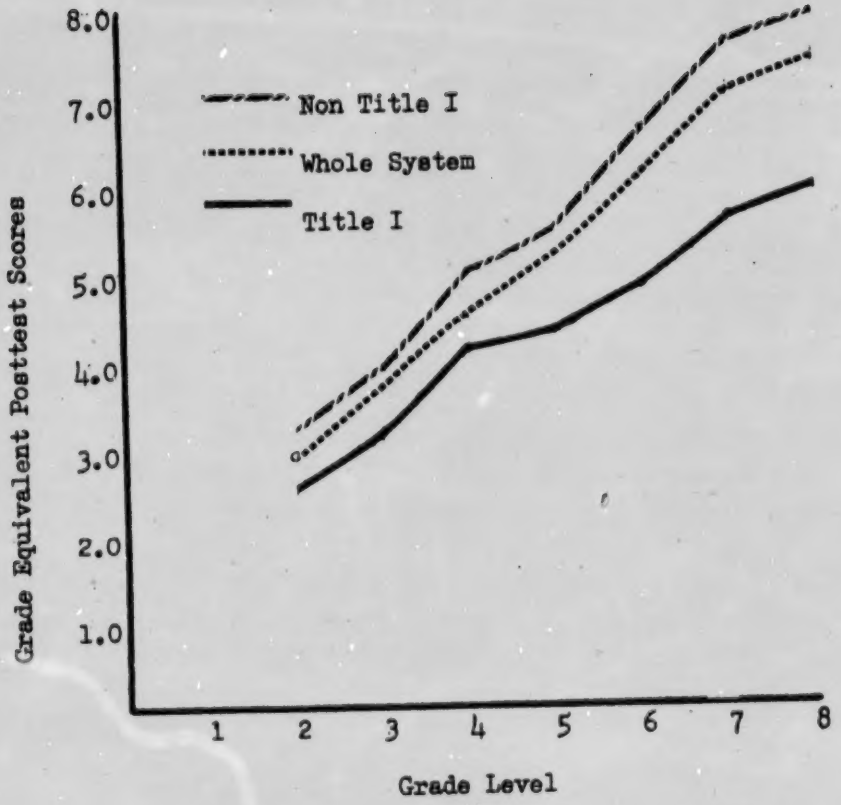

Figure 9. Metropolitan Reading Achievement Posttest Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification C and D

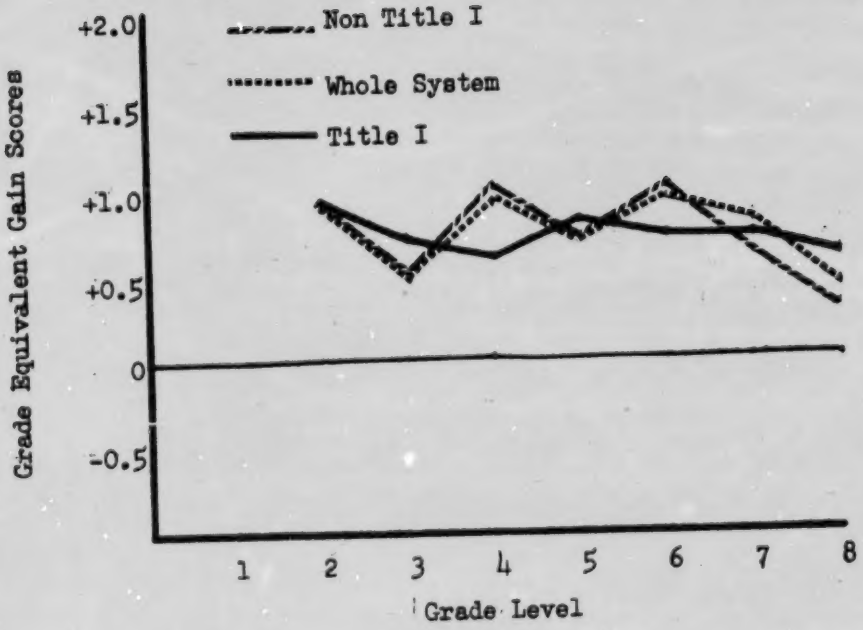

Figure 10. Metropolitan Reading Achievement Gain Scores for LEAs Reporting Pre- and Posttest Data. SMSA Classification C and D

Additional analysis of the data in Table XIII, page 51, indicates that 18% of the gain scores reported for Title I students were 1.1 grade equivalent years or above, 71% were from .5 to 1.0 grade equivalent years, and 11% were .4 grade equivalent years or below. Eighteen percent of non Title I gain scores reported were 1.1 grade equivalent years or above, 57% were from .5 to 1.0 grade equivalent years, 21% were .4 grade equivalent years or below, and 4% indicated negative gain. Analysis of whole system data indicated that 14% of whole system gain scores were 1.1 grade equivalent years or above. Seventy-five percent were from .5 to 1.0 grade equivalent years and 11% were .4 grade equivalent years or below. These data are presented in Table XV, page 56, and indicate that a higher percentage (89%) of the Title I gain scores were .5 grade equivalent years or greater than the non Title I gain scores (75%). Eighty-nine percent of the whole system gain scores were 0.5 grade equivalent years or greater. Title I gain scores more closely reflect the whole system scores than the non Title I gain scores.

Table XV

Comparison of Various Ranges of Reading Achievement Gain Scores for Grades 2-8, SMSA Classifications C and D

Range of Grade Equivalent Gain Scores	Percent of Gain Scores Reported Reported In Table XIII		
	Title I	Non Title I	Whole System
1.1 or above	18	18	14
.5 to 1.0	71	57	75
.4 or below	11	21	11
negative gain	0	4	0
Total	100	100	100

SMSA Classification E. Reading achievement test results for LEAs reporting pre- and posttest data in SMSA Classification E are reported in Table XVI. Mean gain scores by grade level is reported in Table XVII. These data indicate that Title I students achieved positive mean gain scores at all grade levels. The overall (grades 1-12) mean gain score was .66 with a range from -.2 to 1.7 grade equivalent years and a median of .65 grade equivalent years. The non Title I students in Title I schools also achieved positive mean gain at all levels. The overall mean gain for non Title I students was .92 grade equivalent years with a range from .1 - 2.9 and a median of .85 grade equivalent years. Whole system data indicate positive mean gain at all levels with the exception of grade 7 which achieved a mean gain of 0. The overall mean gain for whole system data was .85 grade equivalent years with a range from -.5 to 1.9 and a median of .85 grade equivalent years.

It is evident from these data that Title I students did not achieve the same degree of gain as the non Title I and as whole system students achieved. The Title I mean gain scores were lower than the non Title I mean gain scores in 9 of the 12 grade levels and were lower than the whole system gain scores in 7 of the 12 grade levels. This difference was greater than .3 grade equivalent years between Title I and non Title I data in grades 2, 3, 8, 10 and 11 and between Title I and whole system data in grades 2, 3, 5, and 8. Title I mean gain scores were equal to or higher than non Title I mean gain scores in grades 1, 5, and 6 and were equal to or higher than whole system mean gain scores in grades 1, 6, 7, 9 and 12.

Table XVI

Reading Achievement Test Results for LEAs Reporting Pre- and Posttested Data. SMSA Classification E

Grade	Test	% LEAs	Title I			Non-Title I Ss in Title I Schools			Whole System		
			Pre-test	Post-test	Gain score	Pre-test	Post-test	Gain score	Pre-test	Post-test	Gain score
1	MAT	12.5	1.5	1.6	+0.1	2.0	2.1	+0.1	1.8	1.9	+0.1
2	MAT	37.5	1.9	2.1	+0.2	2.3	3.1	+0.8	2.1	2.7	+0.6
	GMRT	25	1.2	1.8	+0.6	2.3	2.9	+0.6	1.5	2.3	+0.8
3	MAT	50	2.3	2.5	+0.2	3.6	3.8	+0.2	2.9	3.3	+0.4
	GMRT	25	1.6	2.3	+0.7	3.0	3.8	+0.8	2.2	3.5	+1.3
	RFU	12.5	3.6	4.8	+1.2	2.5	4.5	+2.0	2.7	4.6	+1.9
4	MAT	50	2.8	3.2	+0.4	4.4	5.3	+0.9	3.5	4.5	+1.0
	GMRT	12.5	2.6	3.6	+1.0	3.8	4.9	+1.1	3.4	4.2	+0.8
	RFU	12.5	4.4	5.4	+1.0	4.2	4.8	+0.6	4.3	5.6	+1.3
5	MAT	50	3.7	3.7	0	5.1	6.2	+1.1	4.4	5.5	+1.1
	GMRT	12.5	4.3	4.9	+0.6	4.7	5.7	+1.0	4.6	5.4	+0.8
	RFU	12.5	5.0	5.8	+0.8	5.5	5.6	+0.1	3.4	5.3	+1.9
6	MAT	37.5	4.3	4.5	+0.2	6.2	6.7	+0.5	5.3	5.7	+0.4
	RFU	12.5	5.2	6.9	+1.7	5.9	6.0	+0.1	5.5	5.3	-0.2
7	MAT	12.5	5.1	4.9	-0.2	7.4	7.7	+0.3	6.3	5.8	-0.5
	RFU	12.5	5.4	6.0	+0.6	7.2	7.6	+0.4	6.3	6.8	+0.5
8	MAT	12.5	5.5	5.5	0	7.7	9.3	+1.6	6.6	7.2	+0.6
	RFU	12.5	5.7	6.5	+0.8	7.8	8.8	+1.0	6.7	7.6	+0.9
9	RFU	12.5	6.5	7.4	+0.9	8.2	9.2	+1.0	7.2	8.1	+0.9
10	RFU	12.5	7.6	9.0	+1.4	10.2	12.0	+1.8	8.8	10.4	+1.6
11	RFU	12.5	7.0	8.1	+1.1	9.5	12.4	+2.9	8.0	9.2	+1.2
12	RFU	12.5	7.6	8.9	+1.3	10.2	11.6	+1.4	8.8	10.1	+1.3

Notes: All scores reported in Grade Equivalents

MAT - Metropolitan Achievement Test

GMRT - Gates MacGinitie Reading Test

RFU - Reading for Understanding

Table XVII

Mean Gain Scores in Reading Achievement for LEAs Reporting Pre- and Posttest Data. SMSA Classification E

Grade	Title I	Non Title I	Whole System
1	.1	.1	.1
2	.4	.7	.7
3	.7	1.0	1.2
4	.8	.8	1.0
5	.7	.7	1.3
6	1.0	.3	.1
7	.2	.4	0
8	.4	1.3	.8
9	.9	1.0	.9
10	1.4	1.8	1.6
11	1.1	2.9	1.2
12	1.3	1.4	1.3
Grand Mean	.66	.92	.85

Additional analysis of the data in Table XVI indicates that 23% of the reported Title I mean gain scores showed 1.1 grade equivalent years or greater improvement, 41% were from .5 to 1.0 grade equivalent years, 32% were .4 grade equivalent years or lower, and 4% were negative gain. Non Title I data indicate that 32% of the gain scores indicated progress of 1.1 grade equivalent years or greater, 41% were

from .5 to 1.0 grade equivalent years, and 27% were .4 grade equivalent years or below. Thirty-six percent of the gain scores reported for whole system data showed improvement of 1.1 grade equivalent years or greater, 41% were from .5 to 1.0 grade equivalent years, 14% were .4 grade equivalent years or lower, and 9% were negative gain scores. These data are presented in Table XVIII and indicate that the same percentage (41%) of Title I, non Title I and whole system programs reported gain scores from .5 to 1.0 grade equivalent years. The difference in overall mean gain (see Table XVII) resulted from the higher percentage of non Title I (32%) and whole system (36%) gain scores 1.1 grade equivalent years or greater as compared to the same range of Title I gain scores (23%).

Table XVIII

Comparison of Various Ranges of Reading Achievement Gain Scores for Grades 1-12, SMSA Classification E

Range of Grade Equivalent Gain Scores	Percent of Gain Scores Reported in Table XVI		
	Title I	Non Title I	Whole System
1.1 or greater	23	32	36
.5 to 1.0	41	41	41
.49 or lower	32	27	14
negative	4	0	9
Total	100	100	100

Figures 11, 12, and 13, pages 62, 63, and 64, illustrate the results of the reading achievement pretest, posttest and gain score data which was obtained by using the Metropolitan Achievement Test by LEAs in Classification E. The data seem convincing that Title I students in SMSA Classification E schools did not fair as well academically (as determined by achievement test results) as non Title I students in the same schools or children throughout the various school districts. It can also be concluded that Title I pupils in these smaller SMSA Classification E school programs did not experience the same degree of improved performance as children in the larger SMSA Classification A, B, C and D school districts.

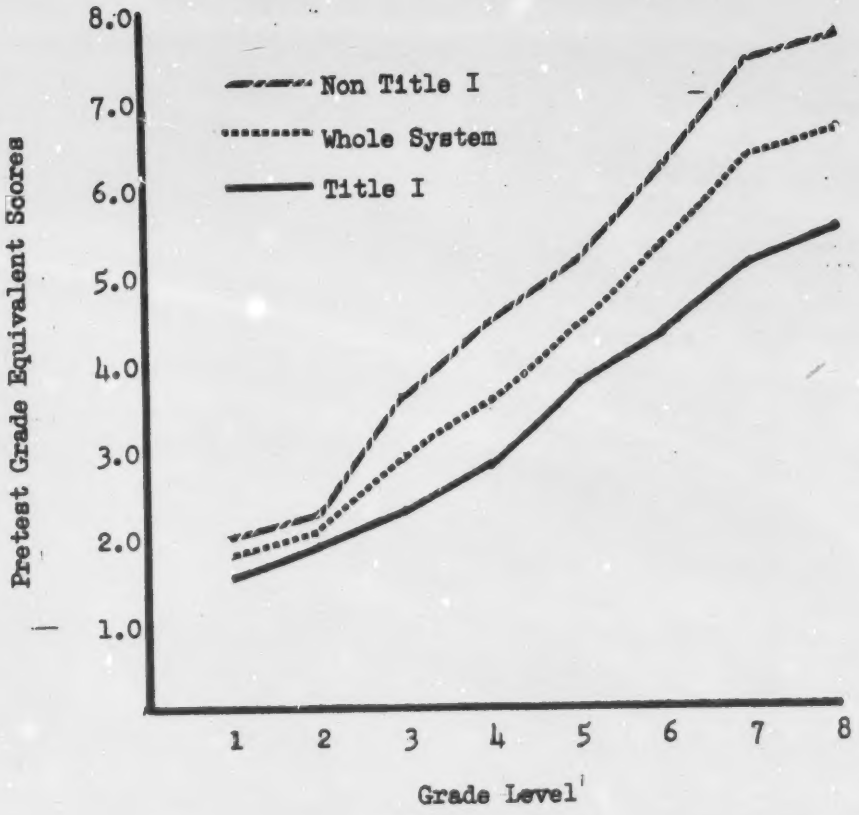

Figure 11. Metropolitan Reading Achievement Pretest Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification E

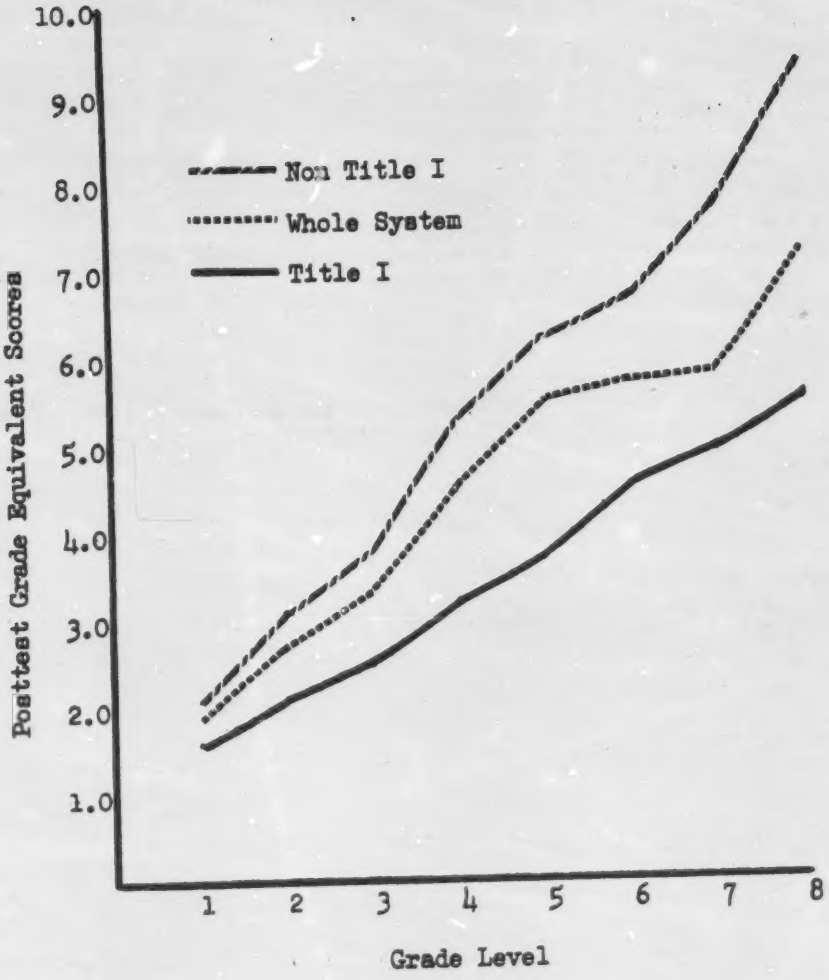

Figure 12. Metropolitan Reading Achievement Posttest Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification E

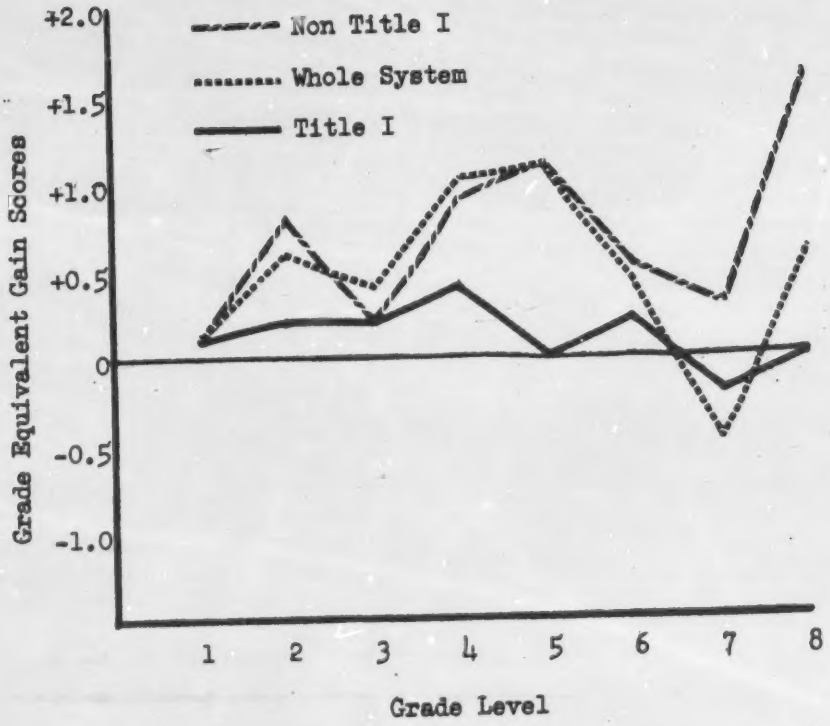

Figure 13. Metropolitan Reading Achievement Gain Score Results for LEAs Reporting Pre- and Posttest Data. SMSA Classification E

Impact on Regular School Program

It is rare that a highly visable, prolonged, special program has little or no effect on the parent system. Title I is no exception. Detailed examination and interpretation of the annual reports lead to the conclusion that LEAs have felt the impact of compensatory education from central office administration to teacher:pupil relationships. Organizational structure, basic attitudes toward the instructional process, utilization of internal and outside resources, parental involvement, permeability of classroom walls, and many other basic educational variables have been permanently changed due to the influence of Title I. Tennessee LEAs have experienced changes similar to local school programs in other states. Key people and events as well as specific project accomplishments have contributed to changes hailed by each LEA as being somewhat permanent and constructive for the entire system.

No doubt the potential effect of Title I on regular school programming was not materialized in FY 73 in many local systems owing to the physical and/or psychological isolation of some programs. But insights and changes were evident in a large majority of LEAs. Apparently the largest and most permanent impact was how the teachers, aides and principals perceived the learning potential of the children and instructional approach to maximize educational gains. Most systems utilized some form of individualized instruction, found it helpful and elaborated on its potential helpfulness in the large context of regular education. The need for each person working with the disadvantaged

children to be keenly aware of the pre-post evaluation procedure set the stage for a positive approach to individual instruction planning. Individual failures could no longer be hidden in the privacy of a whole class. Each child stood out, first as an individual to be taught and, second, as a statistic to be recorded. Higher teacher; pupil ratios, special teaching skills and new materials interacted to exemplify a model for each LEA to observe and hope to emulate in the future.

Individualized instruction was not the only feature of Title I that impacted on regular education in Tennessee during FY 73. First grades of many LEAs are permanently altered because the Title I kindergarten programs are providing readiness training which significantly reduces the time necessary for first grade teachers to spend in similar activities. The children are better prepared for first grade work when they have participated in a Title I program. The benefits of reduced class size and relief of overcrowding in the other grades have been realized. Local education decision-makers are finding ways to maintain the new level of organization from local, state or federal resources. The introduction and effective use of new teaching materials have been so sufficiently rewarding to Title I teachers and administrators that regular teachers are demanding and getting new materials for other underachieving and exceptional children. Teacher-teacher, teacher-principal, teacher-parent and teacher-social agency conferences have increased and have displayed their effectiveness in enhancing the education of the child in the total context of his

ecological social system. Finally, central administrative services which greatly influence the educational process have been strengthened as more personnel, new procedures and automated equipment have been added.

The following specific list of ways in which LEAs made an impact on regular programs was taken directly from LEA evaluation reports for FY 73:

1. First grade students better prepared
2. Regular teachers now using individual instruction
3. Central office efficiency improved
4. Curriculum changes in regular classrooms
5. Teacher aides helped regular teachers
6. Relief of regular teacher overload
7. Regular teachers learning how to innovate and to use new materials and techniques
8. Content areas strengthened in regular classes
9. Closer teacher-pupil relationships as pupils progress
10. Opportunity to study processes of teaching as well as the finished product
11. Regular teachers expressed interest in organizing mini-courses, hobby clubs, interest-centered groups, new reading opportunities.
12. Increased number of conferences between regular teachers and others in key relationship with children

Cost Analysis

Instructional activities were designed by LEAs to meet the needs of the Title I pupils in their districts. Table XIX provides an account of the cost of Title I instructional activities offered during FY 73.

Observation of Table XIX will indicate that instructional activities accounted for 85% of total Title I funds for the representative sample of LEAs. Reading activities were emphasized most in terms of cost, followed by Kindergarten, language, and mathematics. It is interesting to note that the different size school systems allocated a majority of their funds to the same two activities (see Tables XX — XXIII). This indicates that reading improvement and kindergarten activities were seen as critical needs in all areas of the state during FY 73. However, LEAs did not conduct reading and kindergarten programs to the detriment of other areas. Table XIX shows that other needed instructional activities received substantial support.

Table XIX

Summary of ESEA Title I Instructional Activities Costs for Sample*of LEAs in Tennessee in FY 73

Activity	COST		
	$ Total	Percent Instructional Activities	Percent Title I
Art/Music	261,024	2	2
English - Reading	6,617,976	49	42
Eng. - Language Arts	1,569,142	12	10
Industrial Arts	107,814	1	1
Math	1,409,243	11	9
Natural Science	73,114	**	**
Handicapped	216,209	2	1
Other	312,684	2	2
Administration Costs	453,334	3	3
Pre K - Kindergarten	2,397,987	18	15
Total	13,418,527	100%	85%
Supportive (from Table XXIV)	2,470,826		
Grand Total	15,889,353		

* SMSA Classification A (N=4); B (N=4) C and D (N=45); E (N=8)

** Less than 1 percent

Table XX

Cost of ESEA Title I Instructional Activities for LEAs in SMSA Classification A for FY 73

Activity	% LEAs	No. Pupils	COST Total $	Percentage Total Instruc. Activities	Percentage Total Title I*
Art/Music	0	0	0	0	0
English - Reading	100	13,220	1,720,614	34.0	22
Eng. - Lang. Arts	50	2,791	1,020,177	20.0	13
Indus. Arts	25	187	107,814	2.0	1
Math	75	8,121	656,895	13.0	8
Natural Science	25	2,190	73,114	2.0	*
Handicapped	25	N/A	199,689	4.0	2
Other	75	3,066	53,371	1.0	*
PreK - Kindergarten	100	3,512	1,225,190	24	16
Totals	—	33,087	5,056,864	100%	62 + %

* See Table I for total figures

Table XXI

Cost of ESEA Title I Instructional Activities for LEAs

in SMSA Classification B for FY 73

Activitty	% LEAs	No. Pupils	COST Total $	Percentage Total Instruc. Activities	Percentage Total Title I **
Art/Music					
English - Reading	75	5,193	968,456	78	48
Eng. - Lang. Arts					
Indus. Arts					
Math					
Natural Science					
Handicapped	25	N/A	16,520	1	*
Other	50	611	102,789	8	5
Pre K - Kindergarten	100	971	152,632	13	8
Totals		6,775	1,240,397	100%	61 + %

*Less than 1%

**See Table I for total figures

Table XXII

Cost of ESEA Title I Instructional Activities for LEAs in SMSA Classification C and D* for FY 73

Activity	% LEAs	No. Pupils	COST Total	Percentage Total Instruc. Activities	Percentage Total Title I **
Art/Music	18	282	261,024	3	3
English - Reading	89	25,816	3,818,169	56	50
Eng. - Lang.Arts	22	2,677	502,771	7	7
Indus. Arts					
Math.	40	6,790	710,588	10	9
Natural Science					
Handicapped					
Other	40		156,524	3	2
Admin. Costs	N/A	N/A	453,334	7	6
Pre K and Kindergarten	89	2,703	944,484	14	12
Totals		38,268	6,846,894	100%	89%

*Random sample of 45 LEAs

**This column based on sum of instructional and supportive services expenditures for random sample of 45 C and D LEAs

Table XXIII

Cost of ESEA Title I Instructional Activities for LEAs in SMSA Classification E* for FY 73

Activity	% LEAs	No. Pupils	COST		
			Total $	Percentage Total Instruc. Activities	Percentage Total Title I**
Art/Music					
English - Reading	100	1,196	110,737	40	38
Eng. - Lang. Arts	12	99	46,194	17	16
Indus. Arts					
Math	50	490	41,760	15	14
Natural Science					
Handicapped					
Other					
Pre K and Kindergarten	63	149	75,681	28	26
Totals		1,934	274,372	100%	94%

* N = 8 LEAs

** This column based on sum of instructional plus supportive services for 8 reporting LEAs in SMSA Classification E

PART III

SUPPORTIVE SERVICES

Compensatory education programs are characteristically concerned with the development of the whole child. Therefore, LEAs are encouraged to go beyond academic instruction and conduct supportive projects that provide for an improved learning climate for the disadvantaged pupil. Programs which include health, food, clothing, social work, transportation, etc. are essential in some localities to ensure efficiency in the education enterprise for needy children. Without the aid of additional funds Tennessee's LEAs would have been unable to meet the many supportive needs of its less fortunate children.

Quantitative Analysis

Each local school district determined the greatest needs for supportive services for its Title I children and developed programs to meet those needs. Table XXIV provides an account of cost of the Title I supportive services program for FY 73.

Observation of Table XXIV will indicate that supportive services accounted for 15% of total Title I funds for the representative sample of LEAs. The emphasis in Title I is obviously directed to providing instructional services (see Table XIX for comparative figures), but supportive services are in no way diminished across the state. Psychological services were emphasized most in terms of cost, followed by Guidance and Health services. It is interesting to note that the different size school systems allocated a majority of their funds to different supportive programs (see Tables XXV - XXVIII). Whereas

Table XXIV

Summary of ESEA Title I Supportive Services Cost for Sample of LEAs* in Tennessee for FY 73

Service	COST	% Total	
	Total $	Sup.Service	Title I
Attendance	67,774	3	**
Clothing	44,292	2	**
Food	112,324	4	1
Guidance	363,337	15	2
Health	252,750	10	2
Library	224,127	9	1
Psychological	408,368	17	3
Social Work	129,619	5	1
Speech Therapy	77,862	3	**
Transportation	162,431	6	1
Handicapped	69,000	3	**
Other	396,282	16	2
Administrative	162,660	7	1
Totals	2,470,826	100	15

* SMSA Classification A (N=4); B(N=4); C and D (N=45); E (N=8)

**Less Than 1%

Table XXV

Cost of ESEA Title I Supportive Services for LEAs

in SMSA Classification A in FY 73

Service	% LEAs	No. Pupils	COST Total $	% Total Sup.Service	% Total Title I**
Attendance	50	N/A	51,651	4	1
Clothing	25	644	27,830	2	*
Food	50	4,249	55,082	5	1
Guidance	50	19,528	307,584	25	4
Health	50	27,829	102,859	8	1
Library	25	2,396	42,760	4	*
Psychological	75	5,407	385,968	31	5
Social Work					
Speech Therapy	50	N/A	65,850	5	1
Transportation	50	1,862	18,414	2	*
Handicapped					
Other	50	55,514	13,338	1	*
Administrative	25	N/A	162,660	13	2
Total	___	107,429	1,233,996	100	15 +

*Less than 1%

**See Table I for total figure

Table XXVI

Cost of ESEA Title I Supportive Services for LEAs

in SMSA Classification B in FY 73

Service	% LEAs	No. Pupils	COST Total $	COST % Total Sup.Service	COST Title I**
Attendance					
Clothing	25	N/A	500	*	*
Food	100	375	36,135	10	1
Guidance	25	N/A	24,770	7	1
Health	75	1,309	35,310	10	2
Library	25	N/A	126,440	34	6
Psychological	50	270	13,900	4	*
Social Work	50	1,506	19,666	5	1
Speech Therapy	25	N/A	12,012	3	*
Transportation	50	140	34,896	9	2
Handicapped	25	N/A	69,000	18	3
Other					
Administrative					
Total	___	3,600	372,629	100	16 +

*Less than 1%

**See Table I for total figure

Table XXVII

Cost of ESEA Title I Supportive Services for LEAs in SMSA Classification C and D*in FY 73

Service	% LEAs	No. Pupils	COST Total $	% Total Sup.Service	Title I***
Attendance	21	4,645	16,159	2	**
Clothing	34	386	15,092	2	**
Food	42	1,207	20,591	3	**
Guidance	11	651	30,983	4	**
Health	63	15,221	112,681	13	2
Library	13	6,160	50,927	6	1
Psychological	5	95	8,500	**	**
Social Work	34	7,448	101,676	12	1
Speech Therapy					
Transportation	24	1,185	109,148	13	2
Handicapped					
Other	[illegible]	N/A	381,719	45	5
Administrative					
Total	___	36,998	847,476	100	11

*Random Sample of 45 LEAs

**Less than 1%

***This column based on sum of instructional plus supportive services for random sample of 45 LEAs in SMSA Classification C and D

Table XXVIII

Cost of ESEA Title I Supportive Services for LEAs

in SMSA Classification E*in FY 73

Service	% LEAs	No. Pupils	COST Total $	% Total Sup.Service	Title I***
Attendance					
Clothing	37.5	508	870	5	**
Food	37.5	75	516	3	**
Guidance					
Health	37.5	513	1,900	11	1
Library	12.5	185	4,000	24	1
Psychological					
Social Work	37.5	531	8,277	49	3
Speech Therapy					
Transportation					
Handicapped					
Other		N/A	1,225	8	**
Administrative					
Total	___	1,812	16,788	100	6

*N=8

**Less than 1%

***This column based on sum of instructional plus supportive services for 8 reporting LEAs in SMSA Classification E

SMSA Classification A LEAs emphasized psychological services, B systems spent more for library services, C and D LEAs promoted health and transportation services, and E districts emphasized social work services.

As shown in Table XIX a broad spectrum of supportive services was provided to supplement Title I instructional activities during FY 73. Each of these services was designed to meet the needs of children participating in Title I activities in an effort to provide an improved learning climate which would increase the potential effectiveness of Title I instructional activities.

Qualitative Analysis

Although Table XIX contains valuable information concerning FY 73 supportive services for Title I the essence of the program lies in the outcome evaluation by the various LEAs. No local district reported a failure in program effectiveness. Every LEA reported that supportive services contributed greatly to the entire school program. Each considered these services a vital part of the overall Title I activities. Many systems reported that large numbers of children would have had great difficulty in attending school if medical, lunch, clothing and/or transportation programs had not been provided. These supplementary services allowed the instructional staff to concentrate more fully on the academic experiences with greater pupil attendance than under non Title I conditions.

Some systems reported that the Title I health services were the first of this type that some children had ever received, particularly immunizations and dental work. Registered nurses were employed in

about 20% of the LEAs to aid in the conduct of these projects. Personal hygiene programs were also implemented by many systems. Significant results reported for this latter program included increased student awareness of nutritional needs, improved sleep habits, importance of personal grooming and enthusiasm for school. The method of measurement for these results were student reports and personal impression.

Nutritional programs were among the most popular supportive service projects. For those LEAs not reporting a Title I food program, a majority of systems particularly those with preschool projects, were served by other federal, state or local programs. Mid-morning snacks and lunches were the prevailing mechanism for nutritional supplements. Most systems reported children's learning capabilities increased when a food program was offered.

Frequent home visits by social workers, school counselors, teacher aides were made to assess needs in most LEA areas. Records were kept on the children's needs and subsequent services provided. In some LEAs these services were funded by other federal, state or local programs in a collaborative effort with the school system. In addition to regular case work, another role that has emerged for school social workers as a result of Title I is that of liaison person between student, home and school. Many LEAs report that the central function of the social work staff included building better rapport among students, parents and teachers by maintaining open, accurate and meaningful communication among the various key people in target children's ecological social systems. These workers proved invaluable

in helping teachers understand some of the students' problems. Case studies and appropriate interventions were made in the lives of students who had special discipline problems, social adjustment problems and some who showed poor academic progress due mainly to personal stress. Many of the problem situations handled by social workers had existed previous to Title I but resources were not available to adequately resolve the conflicts. Once these problems were resolved, students adjusted socially to the school environment and proceeded with academic learning.

An additional aspect of the ecological system intervention lauded by LEAs in FY 73 was the role of truancy prevention. Home visits by attendance workers were evaluated positively in relation to the goal of reducing the rate of school dropouts. The extra personal attention given the habitual truant proved valuable in increasing motivation for school attendance among this problem group. These reported results are based on subjective evaluation criteria used by LEAs. The validity of the conclusions is not questionable in that a significant number of children have benefitted as reported. However, the reader is cautioned against overgeneralizing from these conclusions until more objective data can be obtained.

Other supportive service projects that were highly valued by LEAs included materials and use of the library and special transportation arrangements. Much attention was given to the benefits libraries and librarians provided during FY 73. Many of the systems reported using these facilities to support and enrich their reading programs.

Since at least 40% of Title I instructional funds were spent for remedial reading programs it is understandable that such emphasis was placed on librarians.

Often children had to be brought to the centers — especially where long travel distances were involved in getting the project children to special program locations. Special transportation arrangements were made in these instances and also in taking children on field trips to various points of interest. It was found that these extra educational experiences developed better observation skills in children, enhanced their knowledge in instructional areas and made school more enjoyable. Transportation was also needed to take vocational training students from their regular classrooms to the project centers.

The staff members of the Title I supportive service teams were invaluable in gaining parent support, involvement and appreciation for Title I. The psychological comfort gained through these supportive systems was noted by some of the systems and 13 LEAs declared Supportive Services the most important contributing factor to the success of the entire Title I program.

Exemplary Programs

The organization of supportive services programs is a very difficult problem, especially for the large school districts. The relatively low monetary investment, compared to instructional services, and the lack of adequate manpower resources requires that the operation of ancillary programs be well organized and highly efficient. The two largest LEAs in Tennessee, Memphis City and Davidson County,

operationalized the concept of centralized pupil services in exceptional fashion to serve the compensatory education population. A very brief description of each program is presented below to acquaint the reader with their existence. Both programs were subjectively evaluated extremely high, both in terms of organization and services delivered. Anyone interested in pursuing this model is invited to correspond directly with the LEAs and obtain detailed information.

Memphis City. Supportive services were provided to Title I schools in Memphis through a central Pupil Services Project. The staff included 1 project director, 3 center administrators, 1 psychologist, 9 psychological service workers, 3 psychometrists, and 18 counselors.

The objectives of the pupil services project were: 1) to bring about observable behavioral changes in Title I project participants through counseling, guidance, and/or implementation of recommendations from psychological evaluations; 2) to provide needed health and personal assistance for Title I project participants; 3) to develop a sense of the value of supportive services on the part of principals, teachers and parents of Title I project participants; and 4) to increase the value of the school as a community agency. Services were made available to all Title I project participants and were provided on the basis of referrals from parents, teachers, and principals of Title I project schools. The staff coordinated efforts with various agencies (Shelby County Mental Health Center, Memphis Community Day Care Association, Children and Youth Project #626, North Memphis Action Committee, and St. Jude Nutritional Program, among others)

to provide dental, medical, psychological, and social services for Title I students. A major accomplishment of the pupil services project in addition to the success of the services provided for students was the degree to which parents, school personnel, Title I staff, and community resources worked together in the assessment of needs and the provision of services.

Following is a list of services which were provided by the special project:

Service	No. Students
1. individual and group counseling	6475
2. classroom guidance	698
3. psychological evaluation	680
4. preliminary screening	1200
5. group testing	2644
6. parent involvement	600 Parents
7. direct assistance (clothing, etc.)	5237
8. professional consultative services	N/A

Davidson County. Supportive services in Metro Nashville historically have been provided to all Title I projects through a central office department (Pupil Personnel Services). It was felt, however, that services would be more effective if the staff members worked as teams. Three multidisciplinary Title I teams served the three districts of the Nashville school system. Each team included an attendance teacher, a psychologist, a social worker, a social work assistant, two community education aides, a secretary, and a part-time health nurse (provided by the Department of Metro Public Health).

The following brief description of the team function is a direct quote from the final evaluation report: "The teams worked on concerns of the personnel served related to such problems as emotional disturbance, personal and social maladjustment, poor attitude toward school, poor attendance and major learning problems. Team members engaged in such activities as helping to procure clothing and shoes for needy children from the clothing service center operated for this purpose, working with school personnel, involving members of a family of any child with whom they were working, developing parent and student groups and helping to establish a closer relationship between the home and school (page 5)."

The range of services included:

	No. students (some duplication)
Community resources	
Welfare	275
recreational	42
Mental Health	398
Physical Health	524
clothing store	644
Conferences	
pupil	2395
parent	1646
teacher	2600
principal	1445
combination	961
other	716
Evaluation	
research	42
group testing	109
individual testing	239
observation	245
Meetings	
in-service	64
planning and assignments	398
special	751

Staffings	107
Student placement	204
Transportation (student)	1323
Transportation (parent)	539
Visitation (Home)	4588
Visitation (School)	4875
Other	485
Total	25,615

Part IV

INSERVICE ACTIVITIES

Inservice training was generally tailored to the professed needs of those responsible for conducting the compensatory education instructional programs. Many of the inservice experiences were conducted simultaneously with the school's regular inservice program. This procedure resulted in a sharing of outside and inside resources and techniques, thereby enriching the overall program. The general theme for most inservice projects was individualized instruction. In many LEAs this focus appeared to be a new approach to overcoming the educational deficits of the target children. In addition to academic remediation, major emphasis was placed on the humanizing concept — the whole child, including his social, emotional, and physical well being.

Throughout the state workshops, training programs, activities and evaluation procedures were devoted to assisting teachers and attendance aides in increasing their knowledge and understanding of: 1) the special needs of the culturally deprived child, 2) the philosophy and basic rationale of Title I, and 3) the specific Title I program in which each person was to work — the guidelines for implementing a necessary and effective attack on the educational and behavioral problems besetting the child.

Table XXIX indicates the number of people and days spent striving to achieve the right organizational climate to insure a successful and profitable year for the eligible Title I children. In those LEAs that did not use internal inservice trainers, outside consultants were invited to help instruct the teachers and teacher aides to accomplish the following goals.

Table XXIX

ESEA Title I Inservice Activity in

Tennessee for FY 73

SMSA	Number of Days						Number of Consultants					
Classifications	0-4	5-9	10-19	20-49	50-99	100+	0-4	5-9	10-19	20-49	50-99	100+
A (N=4)				1		3	1		1		2	
B (N=4)			3	1			1	1	1	1		
C & D (N=45)*	9	6	25				30	9	6			
E (N=8)	1	0	7				3	4	1			
Total (N=61)	10	6	35	2	0	3	35	14	9	1	2	0

SMSA	Number of Teachers						Number of Aides					
Classifications	0-4	5-9	10-19	20-49	50-99	100+	0-4	5-9	10-19	20-49	50-99	100+
A (N=4)					1	3					2	2
B (N=4)					2	2		1		2		1
C & D (N=45)*	13	8	14	8	2		11	9	9	14	2	
E (N-8)	8						8					
Total (N=61)	21	8	14	8	5	5	19	10	9	16	4	3

SMSA	Number of Days		Number of Consultants		Number of Teachers		Number of Aides	
Classifications	Range	Median	Range	Median	Range	Median	Range	Median
A (N=4)	37-153	107	2-78	34	65-492	235	53-227	99
B (N=4)	14-295	15	3-21	11	62-300	109	7-109	39
C & D (N=45)*	0-16	10	0-15	2	0-57	11	0-76	10
E (N=8)	0-10	10	0-10	4	0-6	2	0-6	2

*Random sample from the 126 SMSA Classification C and D LEAs

1. Develop a commitment to Title I.
2. Work together in order to function properly in classroom situation.
3. Develop skills in diagnosing and assessing the needs of individual children.
4. Demonstrate skills in new teaching methods and techniques.
5. Direct these new skills and abilities in the best possible manner toward coordinating and planning an effective school year.
6. Understand the many advantages and uses of the varied supply of materials and equipment.
7. Work cooperatively with the staff of the regular school programs to insure a smooth flow for both operations and mutual benefits for all the students.
8. Initiate a system of checklists (monitoring system) for themselves to facilitate keeping the program "on target" and also a yardstick to measure growth or progress.
9. Share knowledge and understanding with their associates through meetings, conferences and written reports.

Inservice training for elementary and secondary teachers was directed primarily at preparing them for remedial programs in reading and math. The reading inservice programs concentrated on helping staff increase their skills in enabling the disadvantaged child to improve his comprehension of reading, build word skills, exhibit an increased interest in reading, reflect a change in his attitude toward reading and initiate independent study habits. Inservice programs in the math area were designed to assist the teachers in planning programs that would develop an understanding of arithmetic concepts, supplement present knowledge of number concepts and encourage the underachiever to seek independent solutions to math problems.

Kindergarten inservice programs were geared to help the teacher:

1. Accept the regulations of Title I concerning the eligibility of participants.
2. Choose instructional topics and activities most appropriate for individual situations.
3. Plan a program that would provide a sound foundation for the first grade bound child whose unsatisfactory home situation or immaturity had stunted normal cognitive and affective growth rates.
4. Include in the program plans for improvement in the following readiness areas: a) communication skills, b) behavioral skills, c) social adaptation, d) positive attitudes toward school and the process of education.

Other subject areas such as English, social studies and science were targeted for inservice activities by a minority of LEAs. In those areas inservice programs were planned to help the teachers and aides meet the responsibility of bringing a low achieving child to his grade level. Vocational training inservice programs were also provided in a few instances to aid the teachers in learning how to work with potential dropouts. Motivation factors and vocational skill development were areas of prime concern for these LEAs.

Inservice providers included university professors, corporation consultants (materials suppliers), State Department personnel, Title I supervisors, and regular school personnel. Although no objective data exist to evaluate the outcome of the inservice programs, the LEA evaluation reports overwhelmingly state that the sessions were highly successful and beneficial to both themselves, the aides and ultimately to the deprived children. Title I teachers were better able to assess their responsibilities and better prepared to discharge them after having participated in inservice training experiences according to self assessment statements. Not only were the workshops helpful in clarifying goals and job descriptions and in building needed skills, but also they were beneficial in establishing organizational structure, climate setting and methods for conducting profitable learning centers. Program objectives were reviewed, diagnostic procedures outlined and sequential instructional activities developed.

Part V

LOCAL EDUCATIONAL AGENCY PROBLEMS

AND RECOMMENDATIONS

When ESEA first began in 1965-66 many new requirements were made of LEAs as well as of the state educational agencies. The LEAs were expected to submit proposals for approval by the SEA, hire additional qualified teachers (who were in short supply in all areas), find space for new programs, evaluate projects, utilize consultants, and try new methods of instruction. They were expected to negotiate with the state and federal governments in ways heretofore untried. Although funds were available to pay for the expanded program elements, many large and most small school districts experienced difficulty in tooling up and implementing the Title I effort. In 1973-74 problems remain but the emphasis has shifted somewhat.

Problems

Whereas in FY 66 the major concerns were lack of qualified personnel and difficulty in developing an evaluation scheme for the projects, in FY 73 the main problems appeared to be lack of adequate or appropriate space, late or uncertain funding, and the continued large number of underachieving children who need special treatment programs. Over the past seven years LEAs have found ways to cope with the project evaluation requirement. Expanded university training programs (aided by increased federal and state funding) have overcome the major manpower shortages. However, the provision for more classrooms and special purpose facilities have not kept pace with the growing educational

needs. Title I has appropriately emphasized programming. However, the success of these compensatory programs may be limited because of the external influence of crowded conditions, noise levels and distractions to the children and teachers.

The uncertainty of the level of funding from year to year has created significant problems for many school systems. In some cases payrolls have been late or in serious doubt until the last moment; ordering needed materials has been delayed; hiring key personnel has lagged; and general uneasiness has prevailed among administrators, supervisors and teachers. The LEAs have identified needs for better planning on their part and improved communication with state officials in the negotiation of project contracts. Ensured funding one year in advance was mentioned as an inducement to enhance planning and program preparation.

The large number of pupils at all grade levels who need compensatory education programs continues to plague school personnel. Seven years of Title I activities have made a significant impact on low-income children and families but educational problems still exist. Many factors contribute to this multi-faceted situation, not the least of which is a lack of total community planning. Local, state and federal leadership and financial support could induce all the human support systems in each community to work in concert to eradicate poverty, ignorance and suffering. Educators in Tennessee continue to be frustrated that their labors do not bear more fruit. However, the condition of these same deprived children <u>without</u> compensatory education activities can never be determined. It could be worse.

Following is a list of the major problems experienced by the LEAs in the various SMSA categories:

SMSA Classification A	%LEAs
1. Personnel problems (too few aides, insufficient staff input, late assignments of staff, staff turnover)	100
2. Difficulties with student screening processes	75
3. Communication with and among Title I staff	50
4. Inadequate and late funding	50
5. Poor student attendance	50
6. Lack of cooperation from non Title I teachers	50
7. Inadequate and insufficient materials and equipment	50
8. Late arrival of equipment and materials	50
9. Inadequate facilities provided	50
10. Lack of planning time for staff members	50
11. Scheduling difficulties	25
12. Reassignment of Title I pupils due to federal desegregation plan	25
13. Vandalism and theft due to lack of storage space	25
14. Inadequate sample size to provide reliable data	25

SMSA Classification B	
1. Late arrival of funds	50
2. Insufficient inservice and planning time	50
3. Uncertainty over funding	25
4. Inadequate facilities provided	25
5. High personnel turnover	25

SMSA Classification B cont'd.	% LEAs
6. Too much time between referrals for supportive services and provision of services	25
7. Title I program lacks flexibility	25
SMSA Classifications C and D	
1. Uncertainty over funding; slowness of funds arriving from state government	38
2. Lack of clear understanding of purpose and functions of Title I programs on the part of regular non Title I parents	31
3. Lack of adequate or appropriate space to conduct Title I activities	20
4. Difficulty in scheduling Title I activities so that pupils do not miss important regular class and age group functions, including recreation, social and enrichment programs	20
SMSA Classification E	
1. Inadequate space and appropriate facilities	50
2. Large number of culturally deprived children needing compensatory and other special education programs	38
3. Shortage of qualified educational, psychological and administrative personnel	25
4. Difficulty in scheduling Title I activities to avoid conflicting with other vital elements in pupils' educational experiences.	25

Inspection of the above list of problems indicates that the trend since 1965-66 is toward internal variables although the problems of interfacing between LEAs and other systems, eg, SEA, teacher shortage, have not totally abated. Solutions to the internal issues would bring about increased local education solidarity, efficiency and effectiveness. Although Title I as a continuing annual program has become somewhat stabilized in LEA/SEA guidelines and procedures, LEAs apparently are still trying to adjust to the relationship with the state and federal governments. The problems between local, state and federal agencies appear to have some effect on the progress toward Title I stabilization at the local level, a natural next step in the evolution of a totally effective statewide compensatory education program.

Recommendations

In appropriate problem solving fashion the LEAs have not only stated succinctly the problems encountered in the conduct of Title I, they have also articulated a set of recommendations that would improve the operation of compensatory education programs in Tennessee. The list stems directly from the problems described in the previous section. Hopefully, in coming years the following list can be negotiated by state, federal and local education representatives in a manner which will increase the degree of success of compensatory education above its present level:

Recommendations	Percent LEAs
Funding on an insured basis - earlier full funding with guaranteed stability and continuity	67
More qualified personnel in administrative, teaching and support roles	67
Simplification of guidelines with more specificity and less restrictiveness	25
Improved student testing and diagnostic measures	18
Improved communication, cooperation and understanding between LEA regular and Title I staff members	15
Improved communication and effective participation between LEA and SEA personnel	13
Increased parental and community involvement	10

Other recommendations made with less frequency but with a significant degree of commitment include:

Additional classroom space

Additional funds for school and playground equipment

Improved inservice programs

Earlier program implementation

Standardized method of student selection

As is evident, the majority of reporting LEAs feel more could be accomplished with a more reliable funding system. Some systems had difficulty meeting payroll and program implementation datelines.

They also mentioned the hardships involved in late deliveries of materials and supplies. Basically, they request bigger appropriations, restoration of reduced funds or at least make allocated funds available as early as possible.

The problem with money ties in usually with next highest recommendation for an improved personnel system. Most LEAs mentioned the difficulty in assigning and notifying personnel of their positions when funding is uncertain. Coordinating all activities — instructional, supportive and administrative — seems to be the general theme of LEA recommendations.

Part VI

SUMMER PROGRAMS

Title I funds are available for summer projects in addition to projects which take place during the regular school year. Even though summer projects may be designed as continuations of the regular school year activities, they are considered new projects for which proposals must be submitted in addition to regular school year projects. Summer projects were approved for 25 LEAs in Tennessee during FY 73. A total of 21,856 children participated in Title I summer projects at a cost of $1,657,114 during FY 73. Table XXX contains a summary of statistical information regarding the number of LEAs in each SMSA Classification, cost of program, and number of children served.

Instructional Activities

This section reports on activities related to cognitive development. Types of projects in which the LEAs engaged, methods by which students were selected, methods by which progress was measured and outcomes of the projects are reported. Inasmuch as only 25 LEAs conducted summer programs, the data in this section are reported as a single group instead of by SMSA Classification.

Table XXX

ESEA Title I Summer Program in

Tennessee for FY 73

SMSA Class.	No. LEAs Title I Approved	Funds Committed	No. of Children	Average cost per child
A	1	25,825	203	127.22
B	2	646,647	12,892	50.16
C	0	0	0	0
D	22	984,642	8,761	112.39
E	0	0	0	0
Total	25	1,657,114	21,856	75.82

Needs Assessment

Following is a list of the means by which children were screened for inclusion in Title I summer programs:

Method of Assessment	Freq. of Mention
Past performance in school	13
Teacher referrals based on test results	1.
Distribution in relation to school attended	4
Parent approval	3
Children eligible to enroll in grade 1 with no previous Kindergarten experience	2
Financial status	1
Desire on part of student	1
Open to any resident, non Title I paid tuitio.	1

Combinations of these methods were used by all LEAs. No single criterion was used to include or exclude students from Title I activities.

Major Activities

Reading and math activities received the greatest amount of emphasis in summer projects. Science, social studies, and kindergarten activities also received significant emphasis.

The following list indicates the major activities that comprised the instructional component of Title I summer programs in Tennessee during FY 73:

Activity	% of LEAs
Art	15
Reading	92
Math	69
Language Arts	23
Science	46
Social Studies	38
Music	15
Cultural Enrichment	15
Physical Education	13
Business Education	13
Kindergarten	31

Methods of Outcome Assessment

A large number of LEAs which had summer projects used standardized tests to evaluate the effectiveness of their Title I summer projects in

FY 73. These tests were supplemented in some instances by teacher-made devices and/or manufacturer or consultant produced performance-based criteria instruments. There were some reported projects which showed no indication of objective evaluation.

Following is a list of measurement instruments used by LEAs in summer Title I projects during FY 73:

	No. LEAs
1. Kindergarten	
teacher observation	1
teacher-made checklist	2
Metropolitan Readiness Test	1
2. Elementary	
California Reading Test	1
California Arithmetic Test	1
Metropolitan Achievement Test - Reading	4
Metropolitan Achievement Test - Math	2
Gate MacGinitie Reading Test	3
Comprehensive Test of Basic Skills	1
Stanford Achievement Test	2
Parent-teacher questionnaires	1
Teacher-made Tests	2
3. Secondary	
California Reading Test	1
California Math Test	1
Metropolitan Achievement Test	1
Teacher-made Tests	4

Outcome of Instructional Activities

Reading, mathematics, English and science achievement test scores are reported in Table XXXI, page 105. Observation of these data indicate that a positive gain was obtained at all grade levels. Gains in reading and mathematics ranged from .1 to 1.2 grade equivalent years. Stanine score gains in English and science ranged from 0.3 to 1.1. The size of the range may be attributed to many factors, including differences in pre- and posttest sample size, program effectivness, the

degree to which the content of the tests correlated with the content and objectives of the project, and amount of time between pre- and posttesting. Table XXXII includes a list of the lengths of time between pre- and posttesting in summer programs. Observation of this table reveals a range from four weeks to one year between pre- and posttests for summer programs during FY 73 with the median being eight weeks.

Table XXXI

Achievement Test Results for Summer Program FY 73

for LEAs Reporting Pre- and Posttest Data

Grade	Test	Test Scores		
		Pretest	Posttest	Gain Scores
		Reading (grade equivalent scores)		
1	GMRT	1.5	1.6	0.1
	CRT	1.6	1.8	0.2
	SAT	1.5	2.0	0.5
2	GMRT	1.7	2.3	0.6
	CRT	1.9	2.1	0.2
	SAT	2.1	2.6	0.5
	MAT	1.5	2.2	0.7
3	GMRT	2.4	2.8	0.4
	CRT	2.9	3.9	0.4
	SAT	2.7	2.9	0.2
4	GMRT	2.3	3.5	1.2
	CRT	3.8	4.1	0.3
	MAT	2.7	3.1	0.4
	SAT	3.1	3.6	0.5
5	GMRT	3.7	4.1	0.4
	CRT	4.6	5.2	0.6
	SAT	3.7	4.2	0.5
6	GMRT	4.3	4.7	0.4
	CRT	5.1	5.7	0.6
	SAT	5.0	5.6	0.6
7	CRT	6.7	7.2	0.5
	MAT	4.5	4.8	0.3
	SAT	5.1	5.7	0.6
8	CRT	7.0	8.2	1.2
		Mathmatics (grade equivalent scores)		
1	SAT	1.3	2.2	0.9
	CAT	1.4	1.8	0.4
2	SAT	2.2	2.8	0.6
	CAT	1.9	2.2	0.3
3	SAT	2.9	3.3	0.4
	CAT	3.3	3.6	0.3
4	SAT	3.2	3.8	0.6
	CAT	4.5	4.8	0.3
5	SAT	3.8	4.3	0.5
	CAT	5.2	5.7	0.5
6	SAT	4.7	5.8	1.1
	CAT	5.8	6.2	0.4
7	SAT	5.3	6.1	0.8
	CAT	6.8	7.6	0.8
8	CAT	8.0	8.5	0.5

Table XXXI continued

		Mathmatics (stanine scores)		
9	MAT	2.5	3.1	0.6
10	MAT	2.9	4.3	1.4
11	MAT	3.7	4.4	0.7
12	MAT	6.0	6.7	0.7
		English (stanine scores)		
9	MAT	3.5	4.5	1.0
10	MAT	3.3	4.3	1.0
11	MAT	3.1	4.1	1.0
12	MAT	5.1	5.4	0.3
		Science (stanine scores)		
9	MAT	4.0	4.6	0.6
10	MAT	4.4	4.8	0.4
11	MAT	4.7	5.8	1.1
12	MAT	6.0	6.7	0.7

Notes: GMRT - Gates MacGinitie Reading Test

CRT - California Reading Test

CAT - California Arithmetic Test

SAT - Stanford Achievement Test

MAT - Metropolitan Achievement Test

Table XXXII

Length of Time Between Pre- and Posttest for Title I Summer Projects in Tennessee for FY 73.

Grade Level	Time Interval					
	4 weeks	5 weeks	6 weeks	8 weeks	1 year	
Kindergarten	4.7%		4.7%	4.7%		
Elementary	14 %	4.7%	4.7%	24 %	4.7%	
Secondary			4.8%	29 %		
Total	18.7%	4.7%	14.2%	57.7%	4.7%	100%

It is apparent that the compensatory education summer programs altered children's behavior in an academically positive direction. A surprising finding is that 83 percent of the reading gain scores and 100 percent of the math gain scores were above the 0.2 grade equivalent years expected for a summer program (95 percent of the posttesting was accomplished within eight weeks after pretesting). These data suggest that the summer remedial programs were quite powerful on their impact on the children. It appears that grades 2, 6 and 8 showed the most gains in reading, while grades 1 and 7 displayed the most gains in math achievement.

Most Valuable Title I Summer Activities

The LEA final evaluation reports contain descriptions of the most valued activities for summer Title I programs. Those activities are listed below:

	Frequency of Mention
Interest and enthusiasm of teachers	4
Individualized, self-directed learning	4
Teacher flexibility regarding instruction	3
Availability of equipment and materials	2
Diagnosis of individual difficulties	1
Improved parent participation	1
Improve self concept of student	1

Impact on Regular School Program

Title I summer projects are separate from regular Title I projects but may be designed as continuations of regular projects. LEAs were asked to assess the impact that Title I summer projects had on the regular school program. Responding to this question was difficult as the regular school program was not in session and impact could not be directly observed or measured. Therefore, the responses were somewhat speculative.

The most commonly stated effect indicated that the Title I summer projects caused modification and strengthening of the regular school program through improved methods and techniques of teaching and by bringing students closer to grade level performance. The next most common response was that Title I teachers learned to be more aware of specific needs of individual children — an awareness which had impact on the regular school program during the following regular term. Several LEAs reported that the Title I summer project had no direct impact on the regular school program although the students who participated in the Title I summer projects were expected to perform better during the next regular school term as a result of their participation.

SUPPORTIVE SERVICES

In addition to those activities related to cognitive development Title I summer projects included supportive services which attempted to provide for an improved learning climate for the disadvantaged child. Food, transportation, and health services were reported as the services which received the most emphasis in summer project during FY 73. Table XXXII includes a list of supportive services offered, the percent of reporting LEAs which offered those services, the number of children served in the reporting LEAs and the percent of the total number of children reported who received the services.

Table XXXIII

Supportive Services for ESEA Title I

Summer Projects for FY 73

Service	% LEAs offering program	No. of students*	% of students
Food	56	3,760	25
Health	44	1,125	7
Social Work	25	573	4
Transportation	56	3,793	25
Attendance	12.5	1,955	13
Library	12.5	443	3
Guidance	12.5	527	3.4
Administrative	25	2,941	19.4
Other	6	38	.2
Total		15,155	100.0

*from reporting LEAs only

INSERVICE ACTIVITIES

Inservice programs were operated for summer Title I teachers and aides by many LEAs for the purpose of providing the best possible summer Title I experience for students and teachers. Inservice workshops, training programs, and activities were designed to accomplish the following objectives:

1. Increase knowledge and skill in relating academic achievement to Title I pupils.
2. Provide increased knowledge of the use of audio-visual equipment.
3. Increase awareness of the value of providing special services.
4. Plan activities, develop techniques, and exchange ideas.

Table XXXIII includes a summary of statistical information relating to inservice programs for summer Title I projects during FY 73.

Table XXXIV

Inservice Activity for ESEA Title I Summer Programs in Tennessee for FY 73

No. of Days		No. of Consultants		No. of Teachers		No. of Aides	
Range	Average	Range	Average	Range	Average	Range	Average
0-10	3.3	0-5	1.5	5-189	36	0-102	17

LOCAL EDUCATION AGENCY PROBLEMS

LEAs encountered a number of problems during the planning and

implementation of Title I summer project. The most frequently mentioned problems were lack of sufficient project funds and difficulty in persuading students to attend summer Title I projects. Availability and scheduling of means of transportation was also reported by several LEAs as a significant problem. Following is a summary list of problems reported by LEAs involved in summer Title I projects during FY 73:

	Frequency of Mention
Lack of sufficient funds	6
Difficulty in persuading students to attend	6
Availability and scheduling of transportation	3
Late arrival of funds, materials and supplies	2
Shortage of planning time	2
Lack of certified personnel	2
Large student numbers	2
Class scheduling	2
Lack of equipment	1

RECOMMENDATIONS FOR CONDUCTING SUMMER PROJECTS

LEAs were asked to list recommendations that would improve the operation of Title I programs in their systems. Earlier funding, improved evaluation methods and the need for more qualified personnel were the most frequent responses. The recommendations made by the LEAs reporting summer projects echo the recommendations made by LEAs reporting regular school year projects. A summary of these recommendations made by LEAs reporting summer projects is as follows:

	Frequency of Mention
Earlier funding	5
Improved evaluation methods	5
More qualified personnel	4
Expand inservice activities	3
Better publicity	3
More centralized locations	3
Air conditioned facilities	3
Additional clerical and library personnel	3
Increased guidance from the state department	2
Lengthen four week program	1
Design local programs based on local needs	1

Part VII

SECTION C PROGRAMS

In addition to regular school year and summer project funds Title I provided funds for additional services for children who were consistantly and considerably below the expected Title I grade levels. These funds were identified as Section C funds and were awarded to LEAs on the basis of need. Section C funds were to be used to provide service in addition to regular Title I project services for children who were achieving consistantly and considerably below grade level expectancy and who exhibited potential for successful learning.

This special population served by extra intensive programming were children whose economic situation, home environment, and self image were among the lowest in the culturally disadvantaged groups. The recognition of these exceptional factors made it necessary to provide services which would enhance all aspects of the child and his environment rather than placing emphasis on strictly academic needs. In as many cases as possible the parents were actively involved in Section C projects. Home visits provided opportunities for Title I staff members and teachers to interact with parents in ways that gave the parents a more thorough understanding of the goals and objectives of Title I projects and ways they could support and enhance the program in the home. These visits also provided opportunities for Title I staff members to assess the physical, economic, and social needs of the child and his family. Referrals for other human services were often made on the basis of observations during home visits.

Of the 146 LEAs approved for Title I funds, 115 were selected and approved to receive Section C funds totalling $824,303. This represents 2% of the total Title I funds. A random sampling of the approved projects reveals that the bulk of these funds was spent for additional personnel, equipment and materials to supplement existing Title I projects in working with the extraordinarily disadvantaged children.

Another portion of this money was used to provide supportive services, including medical and dental attention, clothing, food and transportation. In addition, social work services were offered to ensure that, as far as possible, each child was prepared physically and mentally to derive the maximum from the program.

Most LEAs used teacher-made tests and teacher observation as the mode of project evaluation. Some standardized tests were used. However, the data reported were too varied and insufficient to allow for meaningful analysis. All systems reported satisfactory progress and noted their performance objectives had been met or nearly met.

Two LEAs reported inservice training for Section C projects. The objective of this inservice was to allow teachers and aides to familiarize themselves with their instructional roles in planning and implementing the remedial programs. Inservice training sessions also promoted greater understanding and improved teacher attitudes toward Title I and Section C projects.

Problems encountered in these special projects were similar to those reported by LEAs providing regular Title I programs. Late funding, lack of qualified personnel and scheduling of classes were most frequently mentioned.

The principle recommendations for improving the programs were to make available more sufficient funding to provide more extensive project coverage and more teacher-aide assistance. It was noted that these improvements, if met, would help the designated teachers to plan more effectively and use the available resources.

Overall evaluation indicates that Section C funds provided valuable services and assistance to Title I teachers and students during FY 73.

Summary

The Title I compensatory education program in Tennessee during FY 73 has been examined in this report. Instructional and supportive services were provided for 140,169 children at a total cost of $35,597,661.00. Instructional services were emphasized and were designed to meet the academic needs of disadvantaged children throughout the state. Reading and kindergarten programs received primary emphasis in Tennessee during FY 73. In addition, instructional services were provided to meet the academic needs of children in areas of mathmatics, science, language arts, and other subjects. Supportive services were designed to provide an improved learning climate for disadvantaged children. Psychological and guidance services received primary emphasis during FY 73. Food, health, and social services were included in the diverse schedule of supportive services offered in Tennessee during FY 73.

All of Tennessee's 146 school systems offered compensatory education services to disadvantaged children during FY 73. Using a combination of subjective and objective evaluative techniques, LEAs in Tennessee reported success in reaching the performance objectives established for their Title I projects. A positive impact on the regular school program was reported. Analysis of test data revealed positive gains in academic achievement as measured by standardized achievement test for Title I students in Tennessee.

These data indicate that gains in academic achievement made by Title I project participants in the majority of instances were equal to the gains made by non Title I pupils in the same schools. Apparently,

the historical trend for disadvantaged children to fail to make adequate gains in academic achievement has been broken by Title I compensatory education programs in Tennessee.

Inservice programs for Title I teachers and aides provided numberous and diverse opportunities for personal and professional growth. Inservice programs were designed to assist Title I teachers and aides in the development and implementation of instructional and supportive programs for disadvantaged children. Many inservice programs were also designed to help Title I teachers and aides develop a more complete understanding of the disadvantaged child, his needs and abilities as well as a more thorough understanding of compensatory education programs. Teachers and aides participating in Title I programs were asked to report problems they encountered during planning and operation of their Title I programs and were asked to made recommendations that would improve the operation of Title I programs in their systems. A summary of their responses is included in this report.

A total of 25 LEAs in Tennessee operated summer Title I projects in addition to regular school year projects. The total cost of these summer projects which served 21,856 children was $1,657,114.00 during FY 73. Reading and mathmatics activities received the greatest emphasis in summer projects although a variety of instructional activities was provided. Supportive services were also provided to supplement instructional services. Food, transportation, and health services were emphasized during the summer. Summer projects were evaluated as successful using a combination of subjective and objective evaluative techniques. This report includes a summary of summer Title I project data.

This report also includes a summary of data regarding Section C funds which were allocated to make available additional services for Title I project participants who were achieving considerably and consistantly below the expected Title I grade levels. Section C funds totaling $824,303 were awarded on the basis of need to 115 LEAs.

The administrative role of the state educational agency (SEA), the means by which students were screened for inclusion in Title I projects, methods of outcome assessment, activities reported as most valuable, impact of Title I projects on the regular school system, and other federal projects which were involved in the operation of Title I projects during FY 73 are also summarized in this report.

APPENDIX A

SPECIAL INSTRUCTIONS FOR CLASSIFICATION ANALYSIS[1]

Tennessee Local Educaticnal Agencies differ substantially in size, resources, and other significant factors. For comparative studies Tennessee has classified all Local Educational Agencies into categories that describe the areas which those agencies serve. In compliance with a request by the U. S. Office of Education that classifications be based on Bureau of the Budget definitions, the "Standard Metropolitan Statistical Area" descriptions are being employed. The SMSA Classifications include:

Classification A - the largest "core city" in the Standard Metropolitan Statistical Area (SMSA).

Classification B - all secondary cities within the SMSA that have populations of 50,000 or more. Also included in Classification B should be "older secondary cities" within the SMSA which have populations of less than 50,000. The "older secondary city" is characterized by a high incidence of low-income families, antiquated and high density housing, low mobility of inhabitants, or other traits.

Classification C - all other rural or urban areas within the SMSA which have a population of fewer than 50,000. These can be either incorporated or unincorporated areas.

[1] These instructions taken directly from FY 66 Annual Evaluation Report, ESEA Title I, pages 167-168.

APPENDIX A

Classification D - all local educational agencies serving school districts in urban areas outside the Standard Metropolitan Statistical Area which have populations between 2,500 and 49,999.

Classification E - all local educational agencies serving school districts in rural areas outside Standard Metropolitan Statistical Areas which have populations below 2,500.

Classification of Cities and Counties As Derived From the Manual for Standard Metropolitan Statistical Areas (FY 73)

Classification A

Davidson County

Chattanooga

Knoxville

Memphis

Classification B

Hamilton County

Knox County

Shelby County

Sullivan County

Classification C

Anderson County

Clinton

Oak Ridge

APPENDIX A

Classification D

Bedford County
Benton County
Bledsoe County
Blount County
Alcoa
Maryville
Bradley County
Cleveland
Campbell County
Clay County
Cocke County
Newport
Coffee County
Manchester
Tullahoma
Crockett County
Cumberland County
Decatur County
DeKalb County
Dickson County
Dyer County
Dyersburg
Fayette County
Fentress County
Franklin County
Cannon County
Carroll County
Hollow Rock - Bruceton
McKenzie
Carter County
Elizabethtown
Cheatham County
Chester County
Claiborne County
Hardin County
Hawkins County
Rogersville
Haywood County
Henderson County
Lexington
Henry County
Paris
Hickman County
Houston County
Humphreys County
Jackson County
Jefferson County
Johnson County
Lake County
Lauderdale County

APPENDIX A

Gibson County

Humboldt

Milan

Giles County

Granger County

Greene County

Greenville

Grundy County

Hamblen County

Morristown

Hancock County

Hardeman County

Jackson

Marion County

Marshall County

Maury County

Meigs County

Monroe County

Sweetwater

Montgomery-Clarksville

Moore County

Morgan County

Obion County

Union City

Overton County

Perry County

Lawrence County

Lewis County

Lincoln County

Fayetteville

Loudin County

Lenoir City

McMinn County

Athens

Etowah

McNary County

Macon County

Madison County

Sequatchie County

Sevier County

Smith County

Stewart County

Briston

Kingsport

Sumner County

Tipton County

Covington

Trousdale County

Unicoi County

Union County

Van Buren County

Warren County

APPENDIX A

Pickett County	Washington County
Polk County	Johnson City
Putnam County	Wayne County
Rhea County	Weakly County
Dayton	White County
Roane County	Williamson County
Harriman	Franklin
Rockwood	Wilson County
Robertson County	Lebanon
Rutherford County	Murfreesboro
Scott County	Oneida

Classification E

Atwood	Huntingdon
So. Carroll Co. Spec. School Dist.	Trezevant
Alamo	Bells
Crockett Mills	Friendship
Gadsen	Maury City
Richard City	Watertown